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Rochester Institute of Technology

Run.

By

Kevin Bauer

A Thesis Submitted in Partial Fulfillment of the
Requirements for the Degree of Master of Fine Arts

School of Film and Animation
College of Imaging Arts and Sciences

R.I.T
Rochester, NY
October 24. 2014

Run.

By Kevin Bauer

Submitted in partial fulfillment of the requirements for the degree of
Master of Fine Arts
Imaging Arts/Computer Animation
School of Film and Animation
Rochester Institute of Technology
Rochester, New York

June 2014

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Abstract:

"Run" is an animated graduate thesis film that is 5 minutes in length. You will be taken on a journey with the film's main character, Ethan, as he goes out for a normal jog. While on his jog, different memories start confronting Ethan and he is forced to deal with an event that completely changed his life: the loss of his best friend.

"Run" is a combination of traditional hand-drawn animation as well as 3D animation, and was created using programs like TVPaint and Maya.

This paper will take you through the creation of the film - from storyboarding and creating the original idea to the production stages and the film's first public showing. It will cover everything that I dealt with while making the film and describes how, in the end, this film helped me start coping with a personal issue of my own.

Acknowledgements:

There are many people I need to thank for helping me create this film. First and foremost, I want to mention my thesis advisor and friend through the last year, Brian Larson. Brian was a critical part in the development of this story and making sure I stayed focused throughout the course of the year. Brian was always full of ideas to make the film and story stronger, but he also allowed me to take chances I felt strongly about and keep my creative freedom. Without him this film would have never developed into its final production, and I can honestly say it may never have been created. Through this film I dealt with a personal issue as the story was close to my heart, and Brian was extremely supportive in listening as I reflected and told stories about where my motivation came from and how challenging certain parts of this film were to me based on my past experiences. Not only did Brian help me create an amazing film I am truly proud to put my name on, he helped me deal with different emotions I had kept locked up for the past 7 years.

I also want to thank Mark Reisch and Atia Quadri for being extremely supportive and helpful and offering up great advice through the year. The two of them kept me on task, and neither was afraid to come down on me if they thought I was falling behind. Without them pushing me to my limits and challenging me to try new things I am not sure where this project would have went as I hit the halfway point last December.

Lastly, I need to thank my family and friends for their help through the last year. As this project became my life, they supported me and stayed with me and never got upset as I closed myself off from the world for days at a time working on this film.

Introduction:

"Run" began in May 2013 and was completed in May 2014 in partial fulfillment of my Masters of Fine Arts degree at the Rochester Institute of Technology. It began with a simple idea of a boy looking in his mirror and reflecting on his past, and turned into a full five-minute short that mixed 2D and 3D animation and experimented in rotoscoping and using white space to create a full environment. The film taught me different skills in storyboarding, scriptwriting, pre-production, animation, character and concept design, 3D modeling, post-production, and compositing. I went into this project with many different goals, but there were three that stuck out above the rest, and I feel I truly accomplished with the film.

First, I wanted to refine my skills as a storyteller. I needed to prove to myself that I could set up cameras, work with screen direction and turn my written story into something visual. I really believe I grew a lot over the year working with different camera angles, and improved on my ability to show different emotions by mixing close-up shots to help feel involved and attached to the characters in the film.

Secondly, I wanted to mix the two mediums of 2D and 3D in a successful way. I feel I accomplished that, and when watching the film I am happy with how connected the digital world and hand-drawn worlds are with one another. I tried many different transitions until I found something that worked. By using matching shots between the worlds I was able to keep the viewer interested and have them believe the characters could exist as a 3D figure in some shots and a 2D figure in others.

Lastly, I wanted to use color to help tell my story. The idea of using a white background in the "current" world was planned from the beginning, although it had its issues throughout the

film. My worry was always that by using just a white space, the audience would feel as if it was because I was too lazy to model actual backgrounds. After many trials, I ended up shooting the backgrounds by using lights and paper in my house and by changing the strength and position of the light source was able to give a blue/yellow effect that I feel added to the film and worked perfectly. I also wanted color to help add to the effect in the 2D world, and by having the gradient completely desaturate when Luke removes his hat and reveals his illness, the feeling of the scene was amplified. Although not everyone will catch the use of color in the film, I believe it adds a subconscious effect that changes the viewer's moods in certain scenes.

Pre-production:

Story Development:

Coming up with an original idea and figuring out a way to show your message visually to an audience can be extremely difficult. As I was trying to come up with my idea, I was torn on what kind of project I wanted to do. As I talked with Brian about different stories, he told me that I needed to pick something that would keep my interest for an entire year. The final idea needed to mean something to me. It needed to be more than just a random gag that I would play around with for a year. As I tried to come up with something that was meaningful to me, the one idea that kept popping in my head was to do a film about my friend, Dan, who passed away with cancer when he was 15. I brought up the idea to Brian, and although he liked where I was headed, he had some questions on it. The biggest one being whether or not I would be able to deal with working on such a personal film for a year. I tried telling him it wouldn't be a problem, and that it had been 7 years since Dan passed away and I had dealt with it. Brian kept telling me that doing a film like this would be more challenging than I thought, and that it would take a huge toll on me emotionally as I dug further into it. Being excited about the idea at the time, I didn't want to believe him. I had convinced myself that I had dealt with the loss of my friend, and that doing a film about him would not an issue.

As I started developing the story, I was running into a problem of the film becoming too personal. I didn't want it to be the story of Dan and I. I wanted it to be a story that anyone that had been in a similar situation could relate to. I tried to think of creative ways to tell the story but instead kept getting stuck on how I wanted it to all unfold. The first rough draft I wrote up went like this:

1. Start with boys playing together (Dan and Jay). Jay reaches for a branch and cuts his arm on a stick as the boys are racing to the top of a tree.

2. Fade in to same scar on man looking in mirror (Jay). Jay is alone in bathroom staring at himself. He is older now. He sees a clock in the mirror and the clock transitions to a new reflection.

3. Clock introduces new scene. Jays 12th birthday party and he is opening gifts. He opens a card to show the next gift is from Dan. He opens gift and takes out a small keychain.

4. Jay is looking at memory in mirror with a slight grin on his face. Memory fades out and his reflection fades back in. Jay closes his eyes an puts his head down.

5. Jay and Dan are sitting together. Dan gives Jay a brochure and after he looks at it he gets upset. Knocks it off the table and starts to cry. Dan tries to comfort him and Jay pushes him away. Camera shows the brochure that says Dan has cancer.

6. Jay is staring at himself in mirror. Guilt stricken and upset with himself. Shoves a lamp off of the countertop out of frustration. Close up of the light on the floor.

7. Light transitions to Dan laying in bed. Jay walks in door and sits next to him. Dan is motionless. Jay pulls keychain out of his pocket and puts it in Dan's hand. Dan grips the keychain.

8 . Jay is staring in the mirror with his hand on it, trying to hold on to his last memory with Dan. Memory vanishes and Jay closes his eyes and drops his head. He looks back up at mirror and notices Dan has replace his reflection and is holding his hand up to Jay's. Jay is in awe and pulls his hand back to notice the keychain is now in his hand. Dan fades away and Jay is left with keychain held tightly in his hand.

When I showed this to Brian, he questioned why I had the Jay locked up in a bathroom. My reason was to use the mirror as a tool to connect the past with the present. He told me to be more creative than that, and to get the boy outside. I went back to work on the idea, and ended up coming up with the groundwork for what inspired "Run."

By having the boy outside running, the character could go past different objects that would trigger a memory and help transition between the present and past in a seamless way. As I started to tweak this original story and develop it, Brian asked me another question that stopped me in my tracks. "Is the boy running to something, or running from something?" I wasn't sure how to answer it. In my head, he was just out for a jog. As much as I wanted to say "both" I knew it wouldn't be a valid answer. When Jay goes out for the run, he is running from everything. He has been running from what happened for years without fully dealing with it and accepting what happened. But as he is out for his jog and forced into these different memories, he starts to run towards a resolution. There needed to be an emotional change with the character where he decides that he is sick of running away from this problem and is ready to run towards finding acceptance.

That revelation led to many changes in the story. The general structure stayed the same, and many of the memories kept that same idea. But how could I use the advantage of animation and filmmaking to tell the story in a less direct way? I brought this idea to Mark and Atia, and they started throwing some ideas at me. Why be so obvious when showing that the friend has cancer? They told me to make the audience figure it out without writing it on a piece of paper and putting it on the screen. Mark mentioned that I could have Luke lose his hair and reveal a bald head to Ethan. In our society, some people contribute a bald head to being sick. Although this is not always the case, it would get the audience thinking and possibly plant the idea in their

head. The audience will be hit with shock and left with a question, and it will give a stronger effect.

Possibly the biggest challenge I ran into while writing the story was how I wanted it to end. Brian and I ran through tons of different ideas before settling with what we did. The question I struggled with was what happens when Ethan walks into the room and sees Luke for the last time? Seeing as this was an experience I could relate to, it made it more difficult to think up. I remember when I sat bedside next to Dan the day before he died. There was just silence. He was asleep, and there was coldness in the room. Sitting there, I knew that this was the end for him. You reach a point of acceptance when you have a friend going through something like that. A point where you don't want to see your friend suffer anymore and just want them to breathe again. That moment was the most difficult thing I have ever dealt with. Coming to terms with the fact that someone you love is suffering, and they might be better off finally giving in is unthinkable and will twist your mind around like you've never felt before.

For Ethan, he knows as he walks in the room with Luke that this is the end. The decision I had to make was how Ethan would react. I knew how I reacted in the situation, but Ethan wasn't exactly the same character as me. When Ethan found out Luke had cancer, he panicked and ran away. Faced with another difficult situation, would he turn and run away or decide to stay with his friend in his final moments? At first Ethan walked in the room, saw Luke lying there, and turns and walks out of the room. As Brian and I watched this in the animatic and talked about it, something felt off. If Ethan was truly ready to face what happened, he wouldn't leave again. He would swallow his pride and face his nerves. We completely scratched the original ending and then decided Ethan should stay in the room.

With Ethan staying in the room, the next challenge was finding a way to have Ethan spot the keychain that symbolized the friendship. Brian came up with the idea to have Ethan give Luke the keychain at the birthday party, rather than the other way around. This way, in the final scene, Luke would leave it for Ethan, and that would bring their relationship full circle when he got it back. Knowing that Luke wasn't upset with him, even when we runs away from him at the bench was what Ethan finally needs to find acceptance.

Concept Design: 3D

When I talked with Brian about how I wanted the film to look, the one thing I knew was that I wanted to mix both 3D and 2D mediums. I knew if it was done right, having the current time in 3D and then the dreams in 2D would work well. As I started to think about different designs for the 3D world, the challenge I was having was making sure that the character would work well as a 3D figure and a 2D figure. I drew up some simple sketches and went to work in ZBrush. For some reason it's easier for me to develop a look while sculpting with digital clay rather than in a sketchbook with a pencil. I went in with a basic idea and started sculpting. The biggest trouble I had was creating a character that would work in a serious film. I created a first character and sent it off to Brian, Mark, and Atia for feedback. Although their critiques were OK, Ethan's model still needed work. I needed to find a way to personalize him. I ended up deciding he should be shirtless. This way he is exposed to the audience. I changed around some of his proportions and he started to have a more unique feel to him. After about a hundred different variations, I finally settled on the final design which I was very happy with. Ethan had a realistic feel to him, but was believable as being a character. He was also able to give multiple expressions to help show the small subtleties in his face throughout the film.

The decision to not use backgrounds in the 3D world was something Brian and I talked about from the beginning. The idea started as I was thinking about what a runner goes through. We spoke about a "runners high" and how when someone is jogging they completely zone in to what's going on and block out what's around them. The idea was to try and get in Ethan's head and show the audience what his state of mind was: blank. He wasn't thinking about anything as he went out for the run. He just went out because that's what he does. Where it started to get tricky was in how we wanted to introduce the objects that trigger the memories (tree, bench, card, and house). At first, the objects would dissolve in around him as he was running. There was no structure to it, and the objects would just pop up in front of him and catch his attention. We changed that around so that the objects were already in his path. This put the thought in the audience's head that maybe he ran this route for a reason. Maybe he went this way normally because subconsciously he wanted to remember Luke.

As for the rest of the 3D design, the lighting and texturing posed the most issues. As I've talked about already, I really struggled with how I wanted things to look. As Ethan was outside, I wasn't sure how I wanted the lighting to look. Since he was just in a white space, where would the light source be coming from and would it cast a shadow? I experimented with this a little bit and ended up throwing away the shadows and going with a very basic lighting pattern. I was very happy with what the lights turned out to look like as he was outside because I found that less was more. Originally, there were shadows everywhere and tons of contrast in the scene. As I watched it and thought about it more, that didn't make sense. If he's in a completely white space, why would there be these great shadows all over the place. When you have so much control over how you want something to look, it makes things more difficult. With 3D animation, you can have something look exactly how it appears in your head. That power can cause a problem

because in the end you need to find what works for your film. I didn't want this to be about how beautiful Ethan's texturing and lighting was. I wanted people to focus on the character and his actions. I needed the audience to relate to Ethan, and by simplifying things around him their eyes would be drawn to his face and what he was feeling. I tried to use this throughout the film and was happy with the end result.

Concept Design: 2D

The 2D design was much more of a challenge for me. I don't think I decided on a style or look until about January with the film. I struggled in how I wanted things to look. I would have an idea, and when I tested that idea things wouldn't look as I wanted. I finally reached a point where I was running out of time with how I wanted the design to look. Brian had me bring in a ton of examples, and then we picked each one apart and talked about what might work in the film. As I did different drawings for the backgrounds and characters, they always seemed to look good when I did them and then would lose their appeal the next day.

I was watching my favorite film, "Thought of You" by Ryan Woodward, and I decided to mirror some of the styles/images on the screen. I loved the gestures that were in this film. The characters were so smooth in their movements. I knew that I wouldn't have the time to necessarily do that but was inspired by the simplicity of the characters. They didn't have faces, didn't really have hands, and were very sketchy. I also loved the active line that was kept in the film and decided I wanted to try and replicate that. I started doing some tests with keeping an active line and ended up filming a reference video of myself throwing a ball.

As I was rotoscoping over my reference video, I realized that this was the exact look my film needed. The rotoscope had an appeal to it that was pleasing, and since animation is drawn directly over reference footage it has a realistic feel to it that fit well with my 3D style. I decided to elaborate on it a little and see what I could come up with. A memory is not a complete thought, I figured. For the most part, you only remember the things that were important in a scene. For instance, if you think about someone throwing a ball, you most likely wouldn't remember what the characters feet did at the time. You would be focused on the ball, and the motion of the arm. I started testing this out, and decided to only draw what was important in a

scene. As I did a test of myself throwing, I would hold out on drawing the lower body for 10-15 frames at a time. As I watched it, my eye was drawn to the ball and filled in the rest of the scene in my head. The fact that there were no feet or legs in more than half of the drawings didn't bother me. I loved the look it had, and there was a motion to the line that was similar to "Thought of You." The character had life because everything was so active in the scene.

I tested this out with some other scenes and ended up loving the result. When I spoke with Brian about it, he was in full support of the look as well. To be honest, I was skeptical about rotoscoping at first. I had done it once or twice before and never loved the result. I didn't see the appeal in simply tracing. What's the point of being artistic and creative if you are just going to trace? I soon realized that there could be so much more to it than just simply tracing. By playing with an active line and only drawing certain parts of the frame, the scene came alive and had a unique feel to it that blended beautifully with its 3D counterpart.

After I figured out how to draw the scene, I needed to decide what I wanted the characters to look like again. They still needed to match the 3D, but the rotoscoping had changed things a little bit for me. I went back to the drawing board and started watching more films and studying different character designs. I ended up being inspired by the look and design of Patrick Smith in "Puppet." Patrick was able to show a ton of expression with such a simple face. And his sharp lines matched what my model was in 3D. I recreated Ethan and Luke with Patrick Smith's design as my inspiration. Now I had characters with a ton of movement, but those characters were also economical while still allowing a broad range of facial expressions.

Storyboard and Animatic:

To be honest, I was always someone that slacked off when it came to storyboarding. I didn't have the patience for it and was always too anxious to just jump in and start animating. I figured that I could make changes along the way and things would just work themselves out. Brian told me to take a different approach. Create a detailed storyboard, and rework it until it's as close as it can be to a final story. Brian recommended I draw the storyboard on flashcards so that I could spread them out and move things around. I figured I would give it a shot and ended up loving it. By drawing each scene on a separate card, we could move shots around and change the story layout so much easier than normal. We spent a couple of weeks trying out different sequences until we finally settled on a rough idea of the film's layout.

Another question I ran into while doing the storyboard was: why was I doing this as an animated film? Animation gives you the freedom to create anything you can think of. That's how it's different from film. With film, you are restricted to what your actors can do and what your location is. With animation, you can do whatever you want. My original story didn't give much reason as to why I was doing this as an animated film. I could easily just have someone run in front of a green screen and be finished with half of the film in a night. As I thought about this, I wanted to use the environment and 2D scenes to really make this feel like an animated film. The backgrounds are white, but the objects Ethan run into come from all different direction. They pop up in front of him and fall from the sky in order to catch his attention and get him thinking. This is where I could use the freedom of animation. I was also able to use it with the 2D memories. Although each memory is shot in a very structured way, the transitions that lead us from one world to the other are very abstract. When we are in the 2D world the line is never complete, and we rarely see a full image. Animation allowed me to be simple with the scenes

and use color to help tell the story. The color of the backgrounds, the color of the characters, and even having the color wipe out were all useful parts in connecting the style with the story.

After the general shot structure was figured out it was time to draw up an animatic. It's really amazing what you notice when you start timing things out. When I put all of the shots in order and did a rough timing on the film, it wasn't working at all. The story just felt incomplete. There were not enough close-ups of Ethan's face to show the emotion he was dealing with. We also started to realize that many of the transitions between the 3D and 2D world just weren't working. This forced us to go backwards and redraw how the story was told. We thought of new ideas and different ways to work transitions. After multiple test trials, I finally came up with an animatic that I felt got my story across. I sent it out to some people to watch through and received good feedback from them. I was most interested in seeing if someone who knew nothing about the story would be able to figure out what was going on. Everyone I spoke to had good advice and was able to understand the relationship between Ethan and Luke. I reworked some different scenes to help match the feedback and things started to fall in place. The timing and camera angles in different scenes started to switch around more and more and things were making sense.

After I had the rough animatic hand-drawn, it was time to start putting together a 3D animatic and see what things might look like in Maya. This ended up showing more flaws of the film. The biggest problem I had was the camera angles of Ethan as he was running in the white space. The screen direction was switching every other shot, and it just didn't feel like we were connected with the character. I really struggled with this, as there are only so many different things you can do with a character running. I started to add in more close-ups of the body. Shots

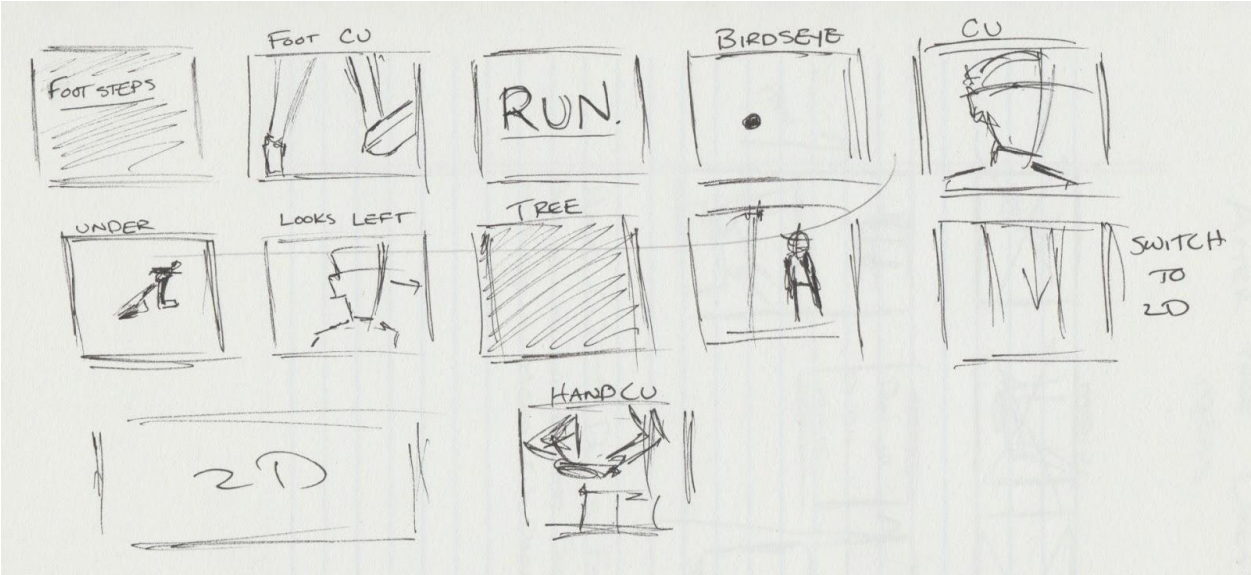
of feet swinging, close-up shots of his chest and shorts, and all of the sudden it really started to feel like there was a connection with Ethan and the audience.

As I reworked each 3D scene and put the shots in order, Brian and I would talk things over about what worked and what didn't. We realized there were some problems with how I was introducing the objects that triggered the memories, with the biggest issue coming from the birthday card. At first, there was a balloon that Ethan would run by and grab his attention. As he looked towards the balloon, more balloons would fill up the screen and then there would be a matching shot that brought us to the birthday party in 2D. We tried this, and it wasn't working. It just didn't fit with the rest of the film. Brian recommended I try a card, and then match that to the 2D birthday party. I gave it a shot, but could not figure out how to have the card introduced in the 3D world. At first I just had Ethan run by it as it was lying on the floor. He would stop and kneel down to read what was written. It still was not working. It was missing something and felt forced. Brian told me to try and have the card fly in from off-screen, and get caught on Ethan's leg. If it's caught on his leg he needs to see what it is. When he grabs it to look at it you can match it up with the memory. I gave that a shot and something still didn't seem right.

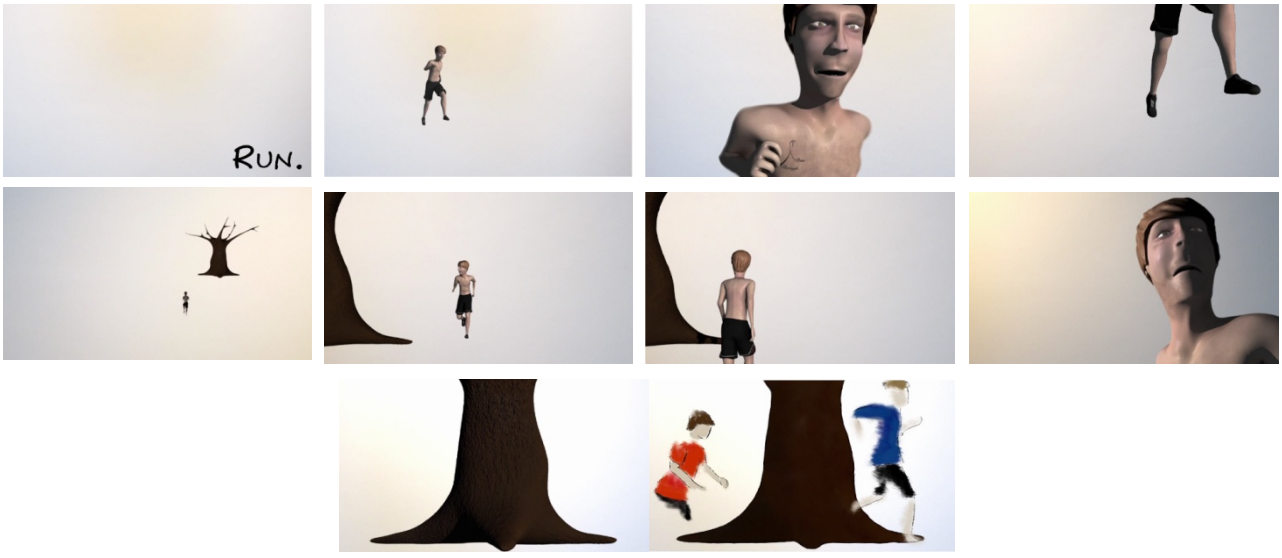
I was stumped on what to do, and then Brian brought up the opening scene in Forest Gump. The film opens and you follow a feather that falls from the sky. The feather flies around the camera and drops to the ground to reveal the beginning of the film. He told me to try something like that with the card. The idea was to have the card drop in to frame, and then float down to the ground and land in front of Ethan. I played with the idea and switched around the distance it would float multiple times. When I finally got it right, it worked perfectly. The card would come in the white screen and then float down and land in Ethan's path. It wasn't

unreasonable, and would catch his eye and cause him to stop. It was exactly what we needed and ended up filling in a transition that was extremely difficult for us to come up with.

First Sequence: Storyboard



First Sequence: Production



Production:

Animation:

When I started brainstorming ideas for my thesis, there was a promise I made to myself as I was writing the story. For my previous films I always fell into a trap of having too much story and not enough time to animate. I didn't want that to happen again. Whenever I went to student screenings and watched other films, the ones that were received the best were not the longest. They were short, to the point, had beautiful animation and a sound story. It's easier said than done though. As you write a story you always think you need to add in different parts so that the audience will understand everything. It's hard to hold back and leave the audience guessing at times. Some of the best advice I had at RIT in my couple of years was during my 2 quarter film, "Bad Seed." My advisor at the time, Stephanie Maxwell, had us come in with our storyboards. The entire class went through their story and we all talked about different ideas with one another. At the end of the class, Stephanie told us all to come in next week with half as many frames but the same story. It seemed impossible at the time, but worked perfectly.

I left myself a ton animation time when I scheduled out my thesis, and for the most part was really happy with the outcome. I did all of the 3D animation first, and spent most of my time studying run cycles and trying to make Ethan look natural in his actions. I used to go to the gym and jog next to a window so I could watch my reflection. I would watch other people as well, and was amazed at how different everyone's running style actually is. I can't even count the amount of times that I redid that run cycle for the film, and to be honest still have small things I would go back and tweak if I had that extra time. Mastering a run is more difficult than you

would think, and changing it just the slightest bit per scene so that it wasn't as repetitive to the audience was a real challenge.

One of the toughest things I ran into while working on the 3D animation was getting the facial expressions right. With the amount of subtle animation I needed in this film it was important that the facial expressions were strong. I created everything as a blendshape in ZBrush, which gave me a ton of freedom when it came to working the face. I ended up having around 50 different expressions Ethan could make, and then by using two or three of them together my options were endless. I actually did them all originally and did rough facial animation for every scene. As I watched it back with Brian, it was just missing something. I didn't want to admit it to myself, but when Brian pointed it out I knew I needed to go back and redo them. I ended up going back through and really detailing the face. I studied my own expressions and used myself as a reference to make sure I was getting all the subtleties that goes into each movement. When modeling a simple facial expression like a smile, you really don't realize how much of your face actually moves until you videotape yourself from a standard pose going into that expression.

The 2D animation in the film actually moved much quicker for me than the 3D. Once I decided that I wanted to rotoscope for the film, everything just fell into place. I could sit down, put on headphones, and crank out 10-15 seconds of 2D animation in a night. With the 2D style I had chosen I had all the freedom in the world with how I wanted to treat my line. If you pick the 2D apart frame by frame you will see drawings that have almost nothing in them. If they were shown on their own you would have no idea what you were looking at, but when played at 24 frames per second with thousands of other drawings surrounding them it tells a story. For me, that is why animation is such a beautiful art form.

Software:

All of the 3D scenes in the film were animated in Maya. For the most part, the modeling was all done in ZBrush, and I owe Mark Reisch a ton for that since he was extremely helpful in teaching me that program and helping me feel comfortable while working in it. Working in ZBrush is remarkable if you have never used it. You can mold absolutely anything you can dream of out of a ball of clay. The tools in the program are endless, and with them you can create beautiful models in short amounts of time. After the model was created in ZBrush, I painted and textured Ethan in there as well. After the figure was complete, it was a simple transfer to bring him into Maya and start prepping him for animation.

For the 2D shots, my first idea was to create everything in ToonBoom. I already owned the program and figured it would do everything that I needed. After struggling to get the exact look I wanted, I spoke with Brian and he recommended I try out TVPaint. I had used TVPaint a couple of times in class but was not real familiar with it. I was able to work it into my budget and ended up purchasing the program. It was one of the best things I did throughout this film. TVPaint gave me a more traditional look, which is what I was looking for. It was also excellent at working with video, which is what I needed since I was doing rotoscoping. I was extremely impressed with it and would recommend it to anyone looking for an easy-to-use, yet professional, 2D animation program.

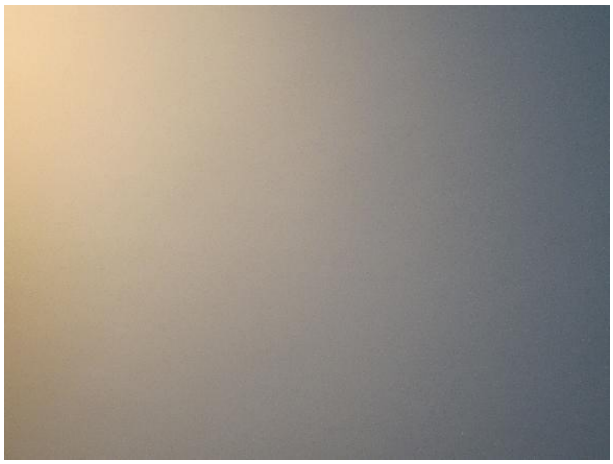
When it came to editing and compositing, all of the work was done in After Effects. I was introduced to After Effects a couple of years ago and love the freedom it gives. Although it has its limitations when it comes to editing if you compare it to Final Cut Pro or Avid, it did everything I needed it to do for this film and creates beautiful titles and transitions.

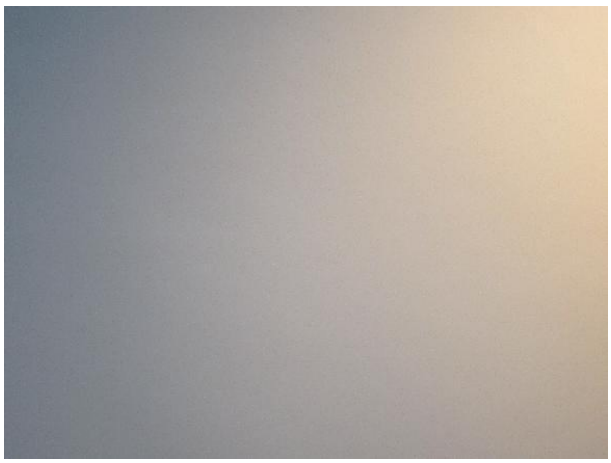
Coloring:

I did not have many problems when it came to coloring in the film. The 3D scenes were all textured in ZBrush, and all of the 2D coloring was done in TVPaint. Although there were a ton of frames to go through, I found it relaxing to color. Being able to sit down, turn on a television show, and just color for hours on end was quite enjoyable. I wanted the color in the 2D scenes to match the line, meaning it needed to be rough and follow the action. It took a little trial and error at the beginning, but once things fell into place it was stress free.

The color in the film also helps tell the story. That was something Brian and I had discussed, and I think it works perfectly when Luke and Ethan are sitting on the bench and it's revealed that Luke is sick. Having the color fade to gray as Luke removed his hat just adds to the emotion in the scene. At that moment, Ethan's world is lost and the color helps express it. As for the 3D scenes, I believe the background colors really worked for the film.

At first, the plan was just to have the solid white backgrounds. Once I watched the final version with Brian we felt it needed something back there. I tried multiple things in After Effects to give the background some life, but nothing ever seemed to work. Finally, I decided to set up a little light table at home and shoot my background on paper. I set up my camera and shot blank sheets of paper while moving the lights around the room. To my surprise, it actually gave more of a blue and yellow effect than I originally thought it would. I fell in love with it when I put it in the film and knew I had gotten the look that was in my head.





Postproduction:

Compositing:

For the most part, compositing for the film was fairly quick. Everything was done in After Effects. The composition was 1280 x 720, square pixels. I used our Render Farm at RIT to render out all of the 3D scenes and did them all in layers so that they didn't have a background. I then brought the rendered sequences into After Effects and laid them on top of the paper backgrounds I shot separately. The only effect that was put on the 3D scenes was a motion blur which was added in compositing. I originally didn't have the motion blur on the film, but Mark and Atia made the recommendation when they saw the final piece and I had enough time to go back and add it. It gave some more life to the run sequences and really helped make things look less digital. The 2D scenes were all brought over complete from TVPaint and then sorted out in the timeline. All of the transitions were hand-drawn for the most part, so there was a minimal amount of compositing when everything was brought into After Effects. The final rendered film was compressed using an H264 codec for SOFA screenings, and came to 5 minutes and 30 seconds at 428mb.

Sound:

The sound is one of my favorite parts of this film. I made a decision when I started this project last year that I didn't want any sound effects. Watching certain emotional animated films such as "The Piano" and "Will" I realized that if the sound was good enough, you could have a ton of success without using sound effects. To me, unless sound effects are done perfectly, they are almost distracting to a film. That's especially true when it comes to emotional films. Having

just a piano or guitar can really touch the audience, and that sound will stick with them after the credits.

I reached out to my composer, Michael Pierratini, last May to gauge his interest in working on my film. He had done music for some of my classmates and I was extremely impressed with his work. He signed on with me that summer and I started to send him files so he had an idea of what he was working with. I told him right away that I didn't want sound effects. I wanted his music to fill in the emptiness throughout the film, and he did it beautifully. I didn't want to give him any restrictions, and put my trust in him that he would create something amazing. When Michael sent me the rough sound a couple months before the film was finished, it brought me to tears. I listened to it on repeat, whistled it, and had it stuck in my head for days. That's how I knew it was perfect. I wanted music that would stick with an audience after they watched the film, and I think that's exactly what this piece did.

Brian and I had some debate on what we felt the sound should be. After I showed him the music, he told me to try using only sound effects in the 3D world, and then having the music come in during the 2D memories. I took his advice did a rough sample to see what it sounded like. To be honest, I actually really liked the result and thought about possibly changing the film up. I wanted to sleep on the idea and see how I felt the next day. The more I thought about it, the more I decided that I missed the music too much when it wasn't there. I couldn't get the rhythm out of my head and found myself humming it as I watched the scenes without it. In the end I decided to keep the music as is, and I am very happy I did.

Credits:

I started working on the credits about 2 weeks before the film was due to be finished. I didn't want to do anything crazy with them, and wanted to keep the beginning title especially simple. I liked the idea of just having the title at the intro small and in the bottom right. It slowly fades out as Ethan runs in and makes for a nice, smooth beginning of the film. Putting the end credits over the backgrounds worked great as well. They seem to transition well with the film and have a nice emotion to them with Michael's piano playing behind them.

Title:

The title was actually quite simple to come up with. When I wrote my first draft of the film the original name was going to be "Reflections." Once the story transitioned to Ethan being outside running, I changed the title to "Run" and never looked back. The title fits perfectly with the story and has two different meanings. Not only is Ethan outside for a run before all of these things start happening to him, but as we get more involved in his past we realize that he has been running for the past 10 years or so from dealing with the death of his friend. The title is short, simple, yet effective.

Critique / Reception:

I was very pleased with the reception the film received at its first public screening. The feeling that I got from different professors and students as they discussed it was that they loved the transitions that were used between the two worlds, and that they were impressed with Ethan's model and design and how relatable he was to them. As glad as I was to hear this positive feedback, it was not what meant the most to me.

I knew how much this film meant to me, and was excited to see the impression it would leave on my family and friends who knew of my situation. When my family saw it for the first time, they all teared up and went quiet. They knew how hard it was for me to talk about this subject, and the fact that I was able to put together this project and then get up in front of a room of people and speak on it blew them away. Seeing how much it touched my close family and friends really made the entire experience worth it for me.

Conclusion:

Overall, this film turned out to be everything I could have ever hoped it would be. I can't even begin to express how much I learned from Brian, Mark, Atia, and the rest of my professors during my time at RIT. The fact that I can still watch this film after working on it for so long, and not get tired of it really speaks to how happy I am with it. It's a great feeling when you have a vision in your head and are able to transfer that to a short film.

In this film, I tried to make every level of production click with one another. The camera angles needed to work with Ethan's emotions. The character design needed to fit the story. Most importantly, the animation style and technique needed to match the message I was trying to get across. I believe I achieved these things throughout this process. The camera angles work in a way that they expose us to what Ethan is seeing, when he sees it. We are brought along with Ethan from the beginning and don't know where he is going or what he is doing until he reaches that point. This was done on purpose, as I wanted to keep the audience guessing. Ethan and Luke's designs, I believe, fit this story well. They are realistic in a way, but simple enough to keep the focus on the actual story that is being told. The animation style, especially in the 2D world, fits this story perfectly. The active line and rotoscoped image really give the feeling of a memory. As I've said before, a memory is an incomplete thought. You don't remember every little detail, and I can't think of a better way to show that than by keeping things very loose and just letting the movements take over.

Looking back at the year, it really amazes me how much went into this. From the initial proposal, to the storyboard and animatic, production stages and working the designs, to rendering out the final project I learned more than I could ever imagine. Brian helped me become a more

developed filmmaker, and forced me to work in areas I struggled with. I knew coming into the project that I struggled with story development and freehand drawing. I just didn't trust myself as an illustrator, and was still trying to figure out what exactly my style was. After this year, I finally feel like I have discovered who I am as an artist. I know my strengths and have found ways to showcase them. I also know where I still need improvements, but now work towards boosting my skills whenever I can find some extra time. I will never stop pushing myself as a filmmaker, and with the knowledge I learned over the last year cannot wait to see what projects I turn out in the future.

Most importantly, this project helped lead me on a road to recover from the most difficult event that I have ever dealt with. Losing one of your closest friends at such a young age will completely change who you are as a person. It has been seven years since Dan passed away, and not a day goes by where I don't think about him. I learned over this last year that keeping my feelings locked up is not a healthy way to deal with this, and have felt a giant weight start to lift off my shoulders as I started to open up to different people around me. I can't explain how much more comfortable I am talking about Dan to my family and friends now after making this film. I'm not afraid to mention him anymore, and will not let what happened wear me down anymore. I have found that the best way to deal with the loss is to celebrate the person that he was, and do everything that I can to live a life he would be proud of.

Thesis Proposal: April 2013

Synopsis:

"Run" is an animation based around the relationship of childhood friends, Ethan and Luke. The story is told through Ethan's perspective as he goes through a journey to reach peace with the passing of his best friend. The film shows them laughing and playing as young boys, until a tragedy brings a conflict into their relationship. We find out through a series of memories that Luke has been diagnosed with an illness, and ends up passing away. This story is about Ethan finally coming to peace with the loss of his best friend.

Treatment:

The film starts with Ethan (23) running on a white screen. The background fades in and shows he is running in the street. Ethan sees a tree in the distance and glances over at it. He stops when he gets closer to it and looks saddened. A young Ethan (10) runs out from Ethan's body and over to the tree with his friend, Luke (10). The boys are climbing the tree and playing together, laughing. As they race to see who can reach the top of the tree first, the film transitions back to Ethan (23) running.

Ethan (23) is running in the street still. In front of him, he sees a balloon. He starts to slow down and stares at the balloon floating to the sky. The street fades out and the screen is white, leaving only Ethan and the balloon. Ethan reaches up towards the balloon to try and grab it, but it is just out of his reach. As he watches it float higher, a new background starts to fades in and Ethan (23) fades out.

It is now Ethan's 13th birthday party. Ethan (13) is looking up at a balloon on the ceiling. Luke (13) taps Ethan on the shoulder and Ethan turns around. Luke is holding a small present for Ethan and gives it to him. When Ethan opens the box, his eyes get wide with excitement. He takes a keychain out of the box and holds it up as he stares at it with a big smile on his face. He turns towards Luke and give him a hug.

The film goes back to Ethan (23) running on the white background. The street fades back in and a bench is shown up in front of him. Ethan runs up to a bench and starts to slow down. He

walks over to it and sits down. Carved into the bench, he sees his name and Luke's name. Ethan runs his finger over his friend's name.

The film goes to a new memory of Ethan and Luke sitting together on the bench. They are 16 years old, and talking with each other. Luke (16) looks over to Ethan (16) and then drops his head back down. He is wearing a hat, and looks upset. Luke slowly pulls his hat off, revealing a shaved head. Ethan looks at Luke in shock, and gets upset. We watch the friend's conversation with one another through their motions, and see Ethan getting more and more upset throughout. Ethan stands up and backs away from the bench. Luke tries to get Ethan to sit back down and talk to him, but Ethan runs off.

We then go back to Ethan (23) running. The frame is white around him. He is running faster now, as if he is running toward something. He starts to slow down and stares ahead of him. A background fades in showing a house. Ethan walks up to the house and looks at the door. He seems unsure of what to do, but finally builds the strength to go inside. As Ethan (23) walks inside, the film transitions to a new memory.

Ethan (16) is entering the house. He looks inside at a bedroom door that is cracked open. Inside the bedroom, we see Luke (16) lying in bed. He looks weak, and has lost some weight. Ethan (16) pokes his head in the doorway and looks at his friend. He goes and sits on a chest beside Luke's bed. Ethan is unsure of what to say. After a couple moments, he reaches into his pocket and pulls out the keychain that Luke gave him at his 13th birthday party. He rests the keychain in Luke's hand. Luke grips the keychain tightly.

The film transitions to Ethan (23) sitting on the same chest in the bedroom. The room looks almost identical to his memory, other than it being cleaned up a little bit. Ethan is sitting motionless, and looks upset. He lifts his hand and puts it on the bed, remembering the place that he last saw Luke. He looks over to the middle of the bed and sees a small box. He leans over and sees his name written on the top of it. He looks confused and grabs the box. He opens it up and sees the keychain he gave Luke resting inside. He pulls it out in disbelief and pulls it to his heart. A small grin comes over him as he closes his eyes.

Rationale:

My goal is to create a short animated film, which mixes the 3D and 2D styles. I will have different styles for the memories and reality world to help blend them together and work as one.

With the 3D scenes, I plan to create a beautiful rendered image that focuses on character struggle and emotion in the animation. There will be a lot of subtle acting in these scenes, and showing the emotion in Ethan through his journey will be key. Ethan will be modeled and animated in 3D, while all of the backgrounds in the "reality" world will be matte paintings. The final bedroom scene will also be modeled in 3D to match the memory that takes place in the same room. I am limiting my modeling by using the white frame throughout the film, and also giving the film it's own style. In the 2D scenes, I plan on using digital programs such as ToonBoom and TV Paint to get a colored image that shows the friends different life events they shared together. I plan on using a "painterly" look with the backgrounds and 2D work. This will give me the freedom to be free and also keep an active line throughout the film. This should give me a little more freedom in my animation so that I don't have to worry about everything being too clean.

With this film, I want to work on my facial animation and showing emotion in my characters. This story gives me that opportunity. I also want to work on perfecting my sense of timing with character animation. I want to be detailed with how I work and focus more on the quality of the animation than the quantity.

Many different films for this project influenced me, such as:

-"From the 104th Floor" - Serguei Bassine

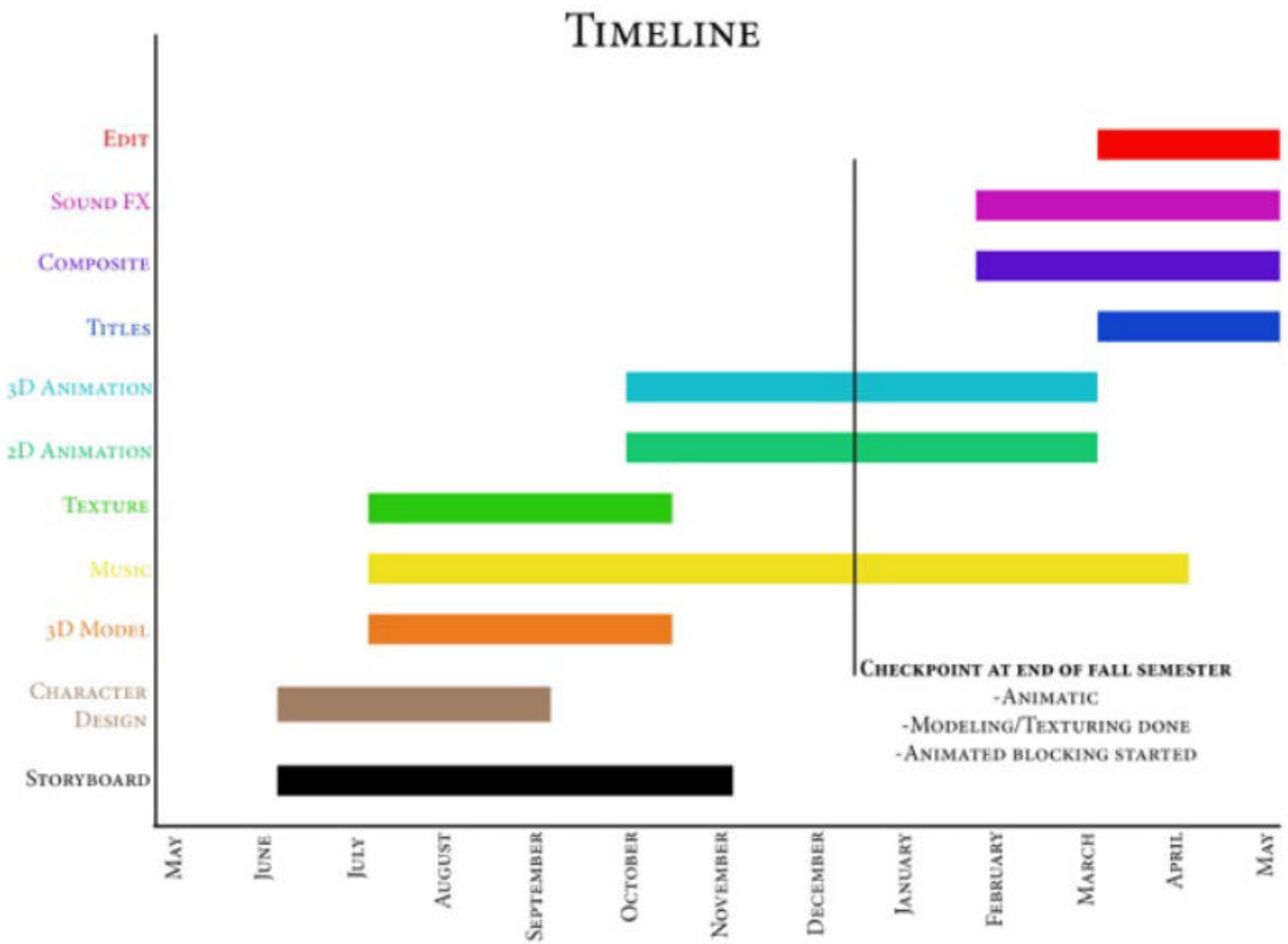
-"Anna and Bella" - Borge Ring

-"Will" - Eusong Lee

-"The Piano" – Aidan Gibbons

My biggest inspiration for this film was from a personal experience. I lost one of my best friends to cancer when I was 16. I had a hard time dealing with it and it took years for me to reach peace with the situation. It was extremely difficult for me growing up and I want to convey that emotion through my art. I understand that doing a film this personal is a risk. The reason I

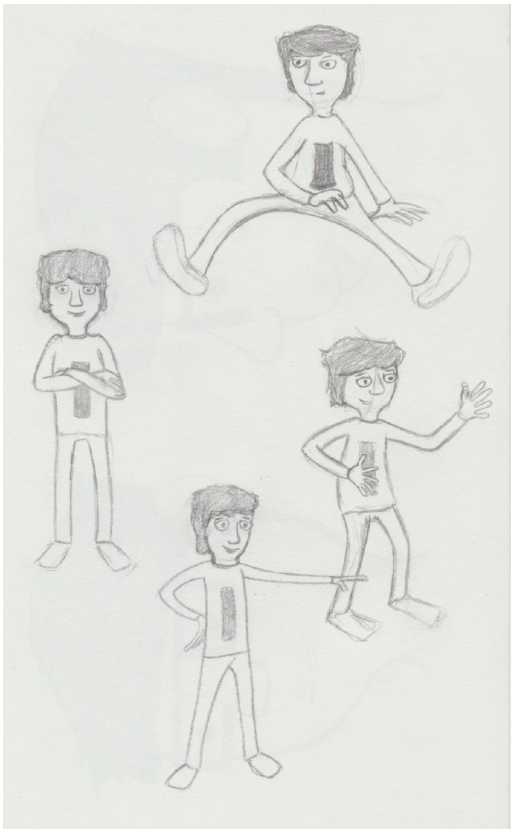
have decided to pursue the idea is because I know it will push me make the best possible film that I can, and will mean a lot to me, my family, and also my friends family when it is complete.

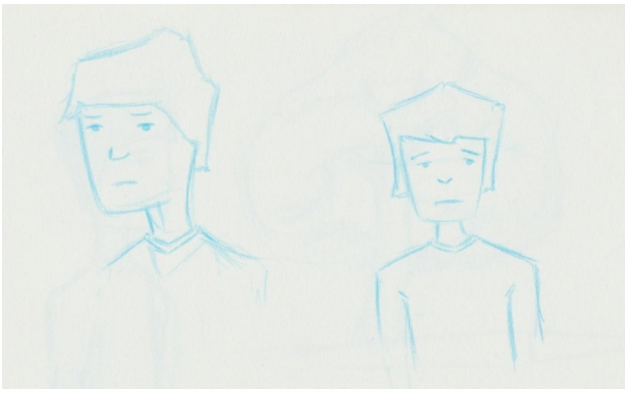

Timeline
Edit
Sound FX
Composite
Titles
3D Animation
2D Animation
Texture
Music
3D Model
Character Design
Storyboard
May
June
July
August
September
October
November
December
January
February
March
April
May
Checkpoint at end of fall semester
-Animatic
-Modeling/Texturing done
-Animated blocking started

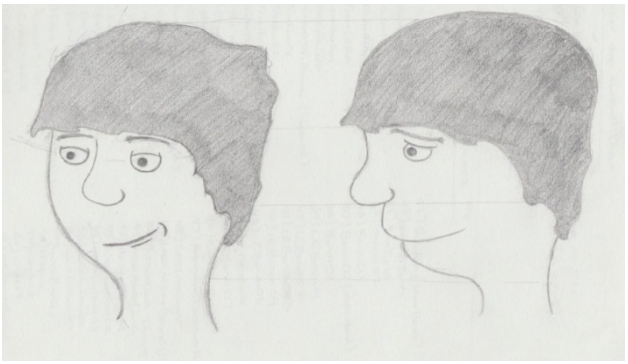
Budget:

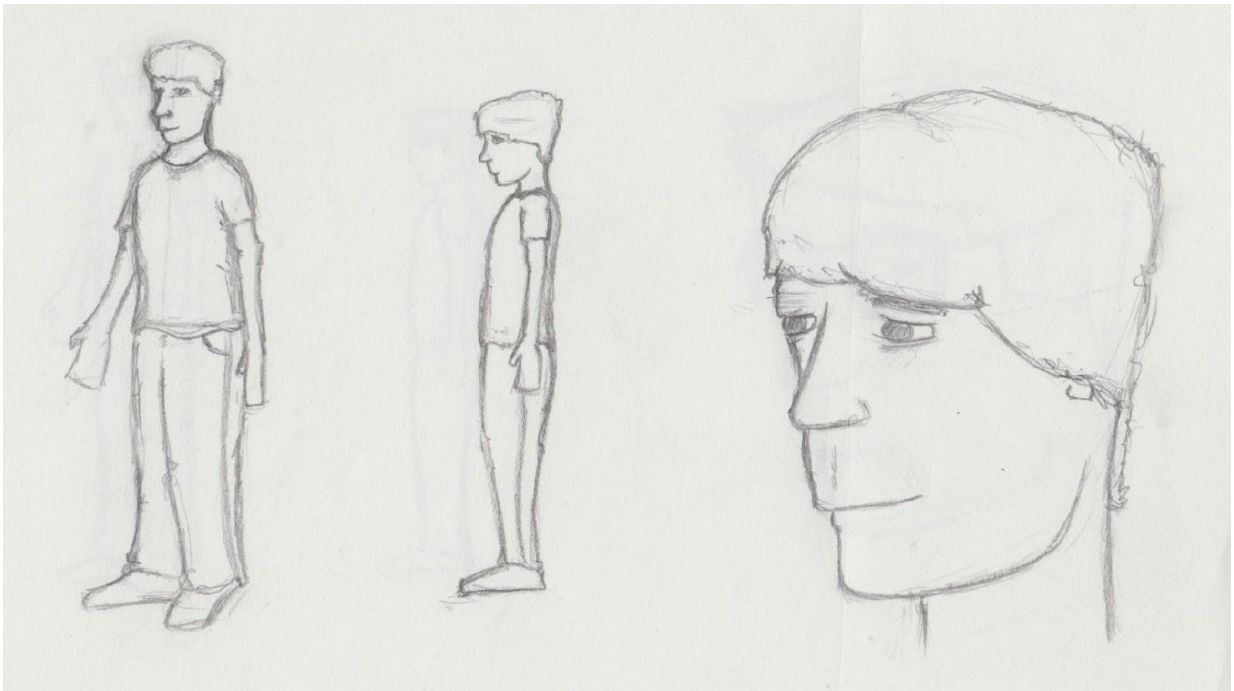
Talent:	
-Director	$0.00
-Producer	$0.00
-Animator	$0.00
-Editor	$0.00
-Storyboard Artist	$0.00
-Character Designer	$0.00
-Composer	$100.00
Supplies:	
-Sound Effects	$50.00
-Art Supplies	$100.00
Programs:	
- Autodesk Maya	$0.00
- Adobe AfterEffects	$0.00
- Adobe Photoshop	$0.00
- ToonBoom	$250.00
- ProTools	$0.00
Festivals:	$200.00
Total Cost:	**$700.00**

Character Development Sketches: Ethan

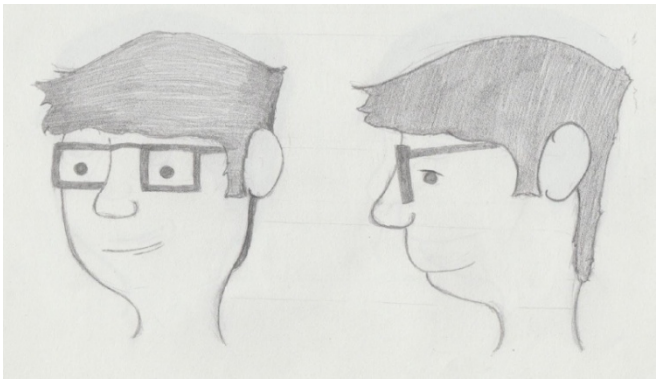


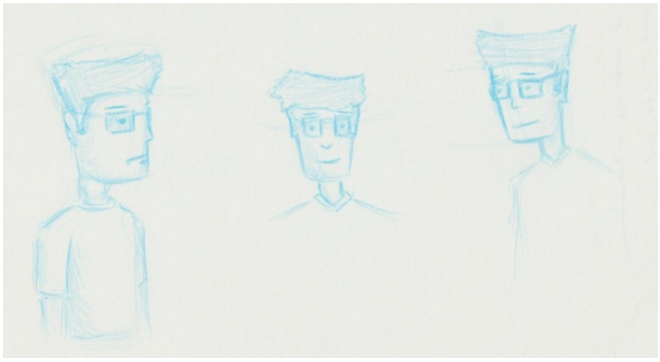


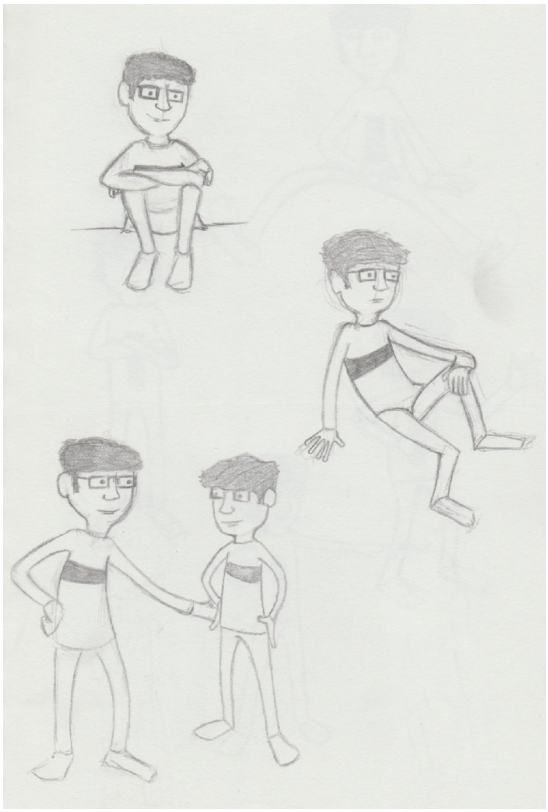




Character Development Sketches: Luke







3D Model Images: Ethan