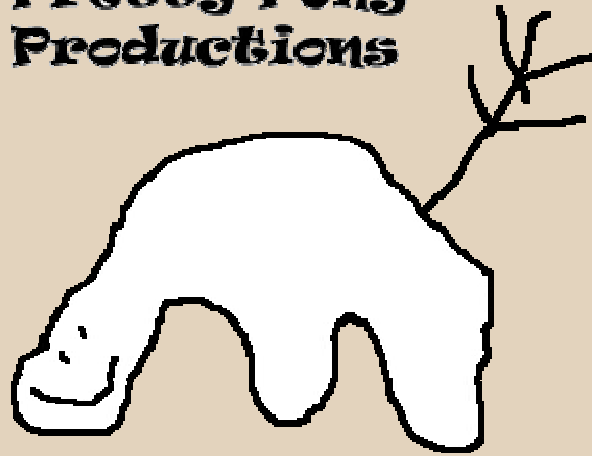


Pretty Pony Productions



**Samal Izekulova
Stu Gritter**

Description:

This project was developed by Samal Izekulova and Stu Gritter, for Brock University's [COSC 3P98](#) graphics course. It runs just over half a minute long, video and audio.

The video!

Raw video accessible as an [wmv](#) and an [mp4](#) (may have to right-click and save-as).

About us:

Samal Izekulova is a 4th year Computer Science student graduating from Brock University. Creating an animation was one of the major attractions of this course for her, and she would find a career path involving animation quite interesting and enjoyable. The initial concepts for the project originated from her background.

Stu Gritter is a graduate of the English program at Brock, and is a 3rd/4th year Computer Science and Interactive Arts and Science double major at Brock University. While developing animations is not an ideal career path for him, it's part of a workflow he wished to learn, and the knowledge and experience from this course should prove very helpful in his future.

Despite the difficulties we encountered with the Poser software and during the implementation of the project, we enjoyed bringing the idea to fruition.

Accreditation & Software:

Models and textures were taken from Poser's library and [MOST Digital Creations](#).

The animation was developed with Poser. We chose Poser because it simplifies the entire process. The availability of free models was a significant factor in this decision, as was the power, ease of use, and availability of the software.

Audio was recorded and mixed with Cool Edit Pro. This program was chosen primarily due to familiarity. Many projects have been completed with it, and although its interface is arguably less intuitive or user friendly than that of similar software such as Audacity or GoldWave, Cool Edit Pro provides a more responsive interface and more powerful toolset.

Final edits were made using Windows Live Movie Maker. Again, this program was chosen primarily due to familiarity. Previous projects have been completed using this software, and its availability and ease of use were large factors. Other tools such as Final Cut, Premiere, or Vegas would all have worked fine, but provided more powerful and more complicated tools which would generally be beyond the scope of this project. The extra tools were not required, and would have only complicated the process.

The website was developed with Visual Studio and uses AJAX. This was a decision based on the fact that one student already had a functional website serving as a portfolio, and these were the tools used to create it. Rather than explore new hosting services or alternative web design choices, utilizing the given master page saved time formatting our information, and simplified the process of shifting from written documents to a hosted webpage.

Concept:

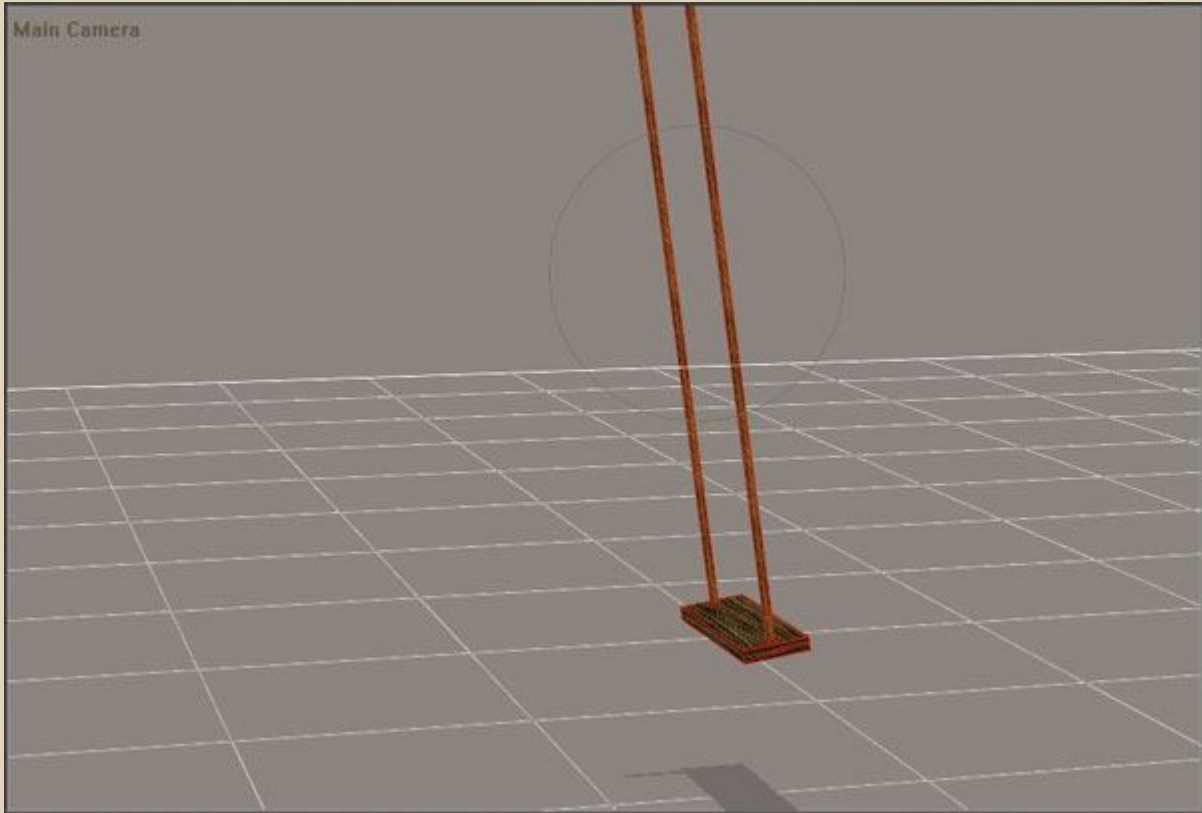
The initial idea was certainly more ambitious and focused on Kazakh national games. We would develop an animation of horses galloping, with humans riding them on a circular track with stands full of crowds. However, due to time constraints we chose to focus on a different nation game, which centers on a man and woman swinging on a large swing while facing each other. This original idea evolved into what the animation is now.

Process:

The animation is just over half a minute long, rendered at 12 frames per second, and -- aside from the models and textures -- everything was done entirely from scratch.

As noted, the initial concepts focused on celebrations of Kazakh culture, including a horse riding event and a giant swing event. After looking briefly at the alarming difficulty and time consumption of animating several horses and riders in a fast paced competition, we opted for the swing idea. This, however, was altered over time. The notion of the culture has been lost, although the giant swing prop remained prevalent and a key component of the animation.

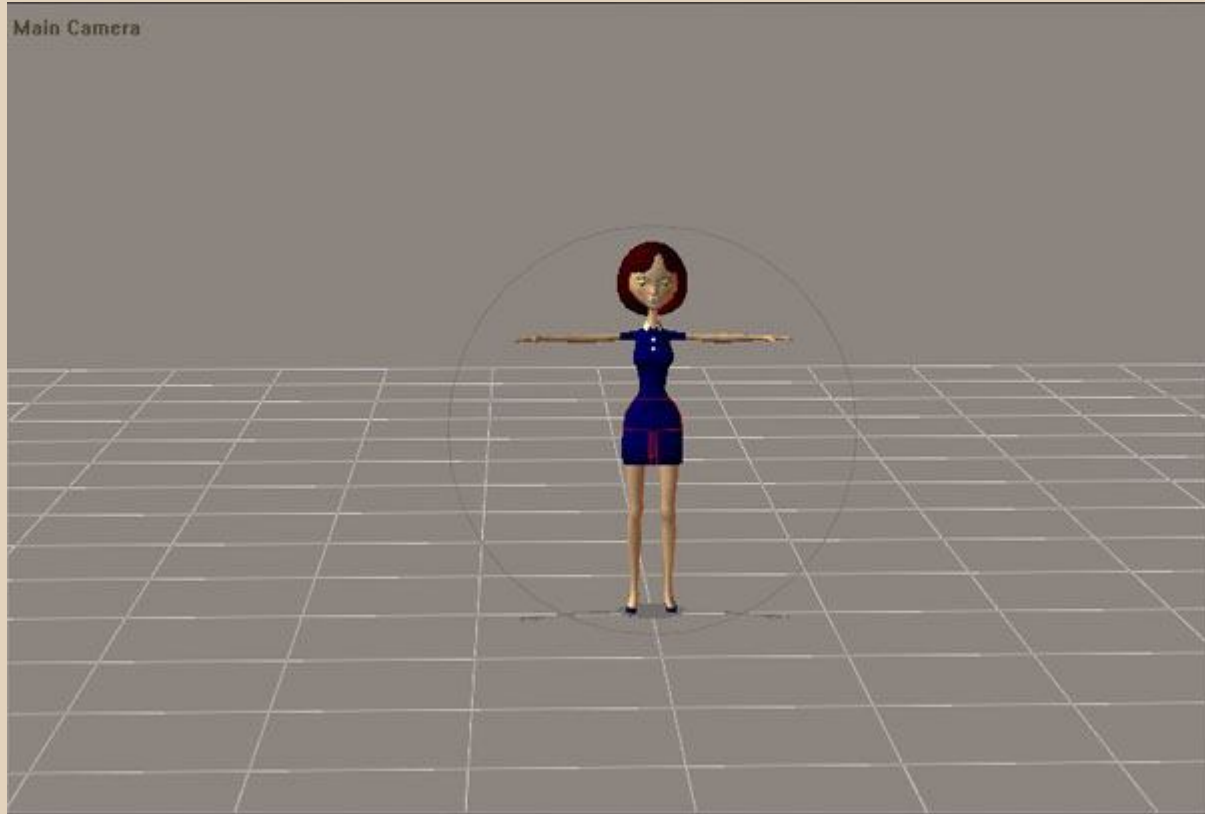
As Poser's library did not contain a swing model, we found one located at the previously mentioned library (the specific swing can be downloaded in zip format [here](#)). This was slightly problematic -- the swing clearly cannot support two people.

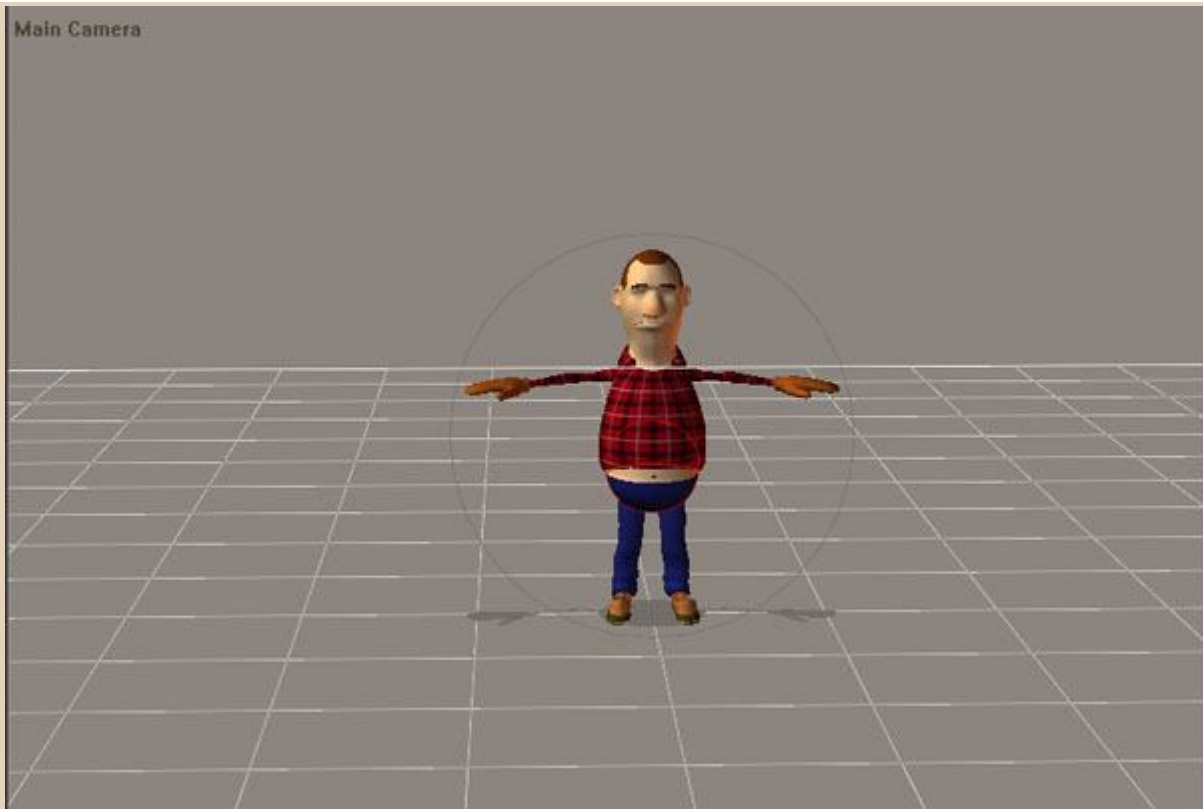


So a simple skew of the model along the z-axis resulted in a viable model:



After we had the swing we needed our two humans, male and female. Ideally we wanted to create either national clothing for human models in Poser or create our own models with national clothing, however, due to time constraints this idea was dismissed and we decided to make it less realistic and utilized cartoon models from Poser's library. The two we chose were Minnie and Barney.





Upon starting the animation, we focused on our two characters and the large swing. As there are a limited number of ways a person can interact with a swing, the script wrote itself. We were hoping to have the 3P98 horse take a starring role as well, but time ran out before we could shimmy it it.

After the basics of the animation had begun, having short movements mapped out and having lights placed in the scene, experimentation with the camera began and quickly led to the matrix-styled camera pan. Thus the conflict of the animation was born.

Upon rendering up to this point, we discovered that the animation ran quite quickly. This required either a rehaul of all the work done to this point, or simply dropping the framerate of the animation from the standard 24 down to 12. This was deemed acceptable due to the fact that the animation is fairly large scale and has very few tiny details.

After this timing had been established the remained of the animation could be completed. We finished with 400 frames, and a complete conflict resolved. Then we needed to render it, which was done in segments due to tempermental issues with Poser which were not quickly or easily resolved.

Upon completing the rendering process, the resulting AVIs were imported into the Windows Movie Maker in order to create a single, seamless animation. This seamless animation was then the reference point for the sound production, used to verify that the sound would sync up properly with the animation itself. Windows Movie Maker was also used to apply the

soundtrack to the animation itself.

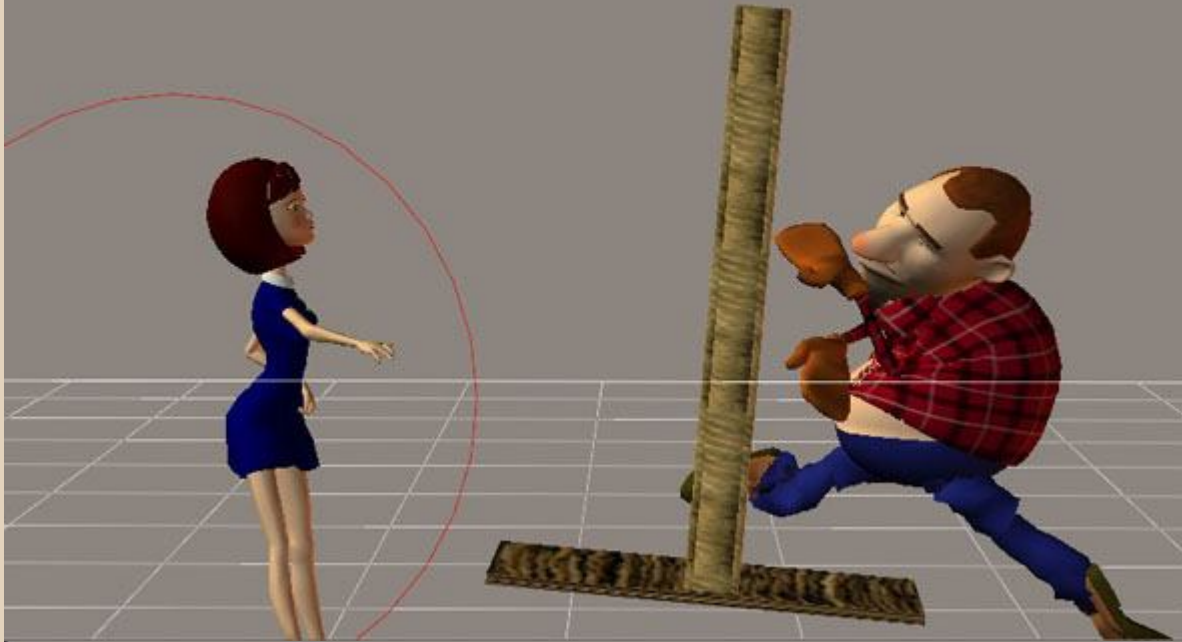
During the tail end of the production the website and documentation were also created. The website uses AJAX and an embedded Youtube player for simplicity, while the file itself is available to be viewed by a browser's default viewer or downloaded directly.

Difficulties:

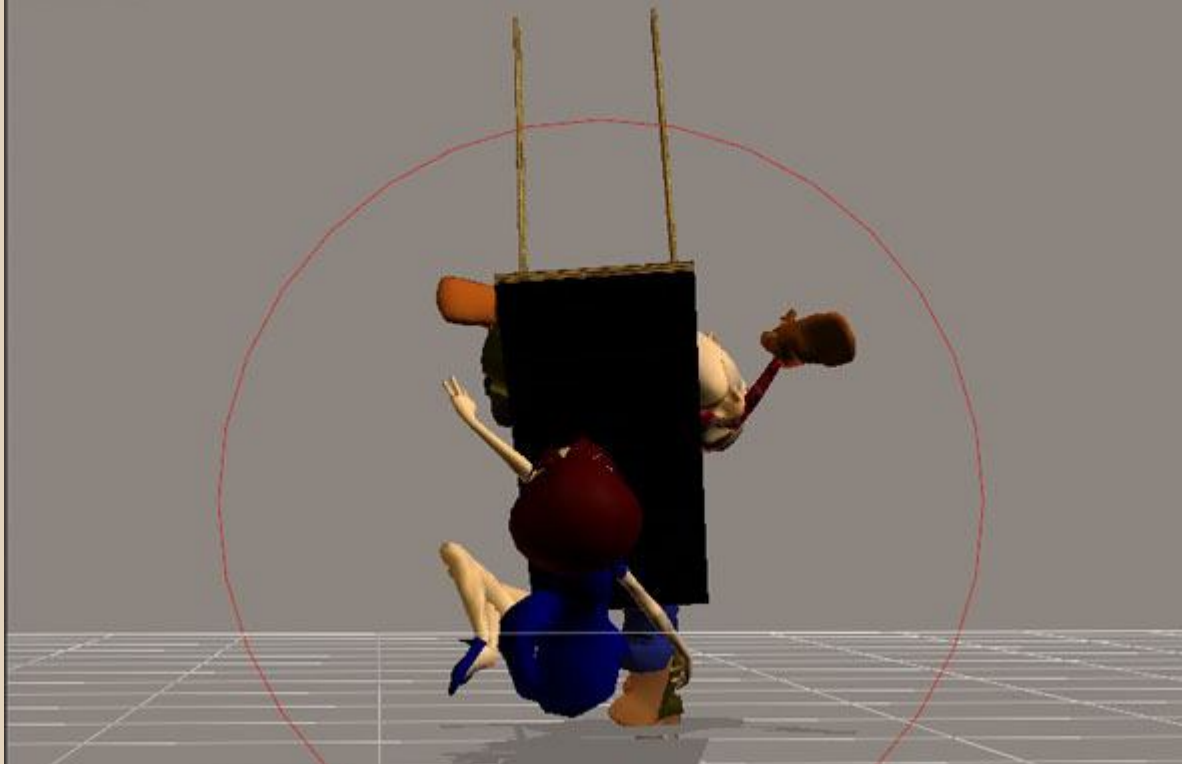
The first notable problem while working on this projet was the distortion of frames in the history of the project. When one segment of the animation was complete, it was saved and separated from the rest of the process. If this was not done, modifications made to the models in later frames would adversely affect the previous frames, and skew and distort those previous frames. There are several examples of this distortion here:



Main Camera



Main Camera



One further problem when rendering was that Poser seemed to shave off the last 10-20

frames which were selected for rendering. As its history mechanism required us to use different files for different segments of the animation, this meant we had to render each portion of the animation with extra material at the end which then had to be cut out later. As this issue had several possible solutions, it was more of a frustration than an obstacle. The solution we chose was relatively unconventional, but certainly the most convenient option available.

As the audio was being created before the entire animation was rendered seamlessly, it was difficult to pin aspects of the soundtrack to specific actions until the last minute. This meant some extra material had to be created and then cut from the project in order to make everything sync up and run smoothly. This could have been circumvented by using a proper script or storyboard, but all in all was not very problematic. In keeping with the initial concept, it was first slated to be Kazakh national music. However, because the idea evolved over time we thought that the national theme would no longer be suitable.

In conclusion, although we started with an innocent national game idea, the project evolved as we moved forward and encountered various difficulties. These difficulties inspired changes and less conservative ideas which we found quite amusing and decided to develop further. As can be seen from the end product, the entire idea of national game became eliminated and was replaced by a volatile style of combatant swinging, and a matrix-style camera sweep -- because we could.

Retrospect:

Using Poser certainly helped in terms of finding publicly available models. This abstracted one entire facet of animation production from us. This was a boon and a decision we would repeat in future endeavours, but as our attention was focused on the animation process itself, the majority of what we learned we could improve is centered around that aspect of the production.

Firstly, maintaining a 24 frames per second render output would be ideal. This is a general standard for blending computer generated graphics with live action footage, and regardless of the goal of a production it is not a bad standard to maintain.

Secondly, a proper script would make the entire process simpler. As we began without a script, once several animations were developed, and dozens of frames ready to be rendered, it became more difficult to introduce new objects or changes to the environment.

Lastly, the extent to which details can be ironed out is always debatable. It is difficult to know when to cease work on a particular animation or frameset. Also, it can be difficult to maintain the same attention to detail throughout an entire animation. When spending an uneven amount of time on various parts of an entire scene, unusually high or low quality framesets will stand out in the final render.