IMMERSIVEVISION

DATABASE ACCESS

Since all the raw data in the IMDB database is in stored as plain text files, we have been trying to work on a fast and efficient way to access it. There is one file for each movie which contains all of the actors in that movie (Total 500,197). There is also one file for each actor which contains all the movies he/she has acted in (Total 1,363,665).

The total size of these files reaches over 680 MB. We have written modules that will allow us to access the data in these files easily, although we are still trying to optimize these functions. The data from these files will help to create a preliminary 2D and a complete stereoscopic 3D graph in Panda.

PROGRAMMING

This week we are working on finding a way to display the data from IMDB (International Movie Database) in Panda. Dan has written some code that interfaces with a program called GraphViz to determine a layout for all of the data. This will be used to determine the x and y position of each of the towers representing an actor to try to group closely related actors together, and minimize overlap between the connections. The z dimension will then be controlled by the dates of the movies that make up the tower.

The code has been written to input our data into Graphviz, then read the output from GraphViz and produce a simple 2D graph layout in Panda. Once Rohan is done building the API that manages the IMDB data set, we should be able to produce graphs that are based on the IMDB data. Then we can modify the code to produce the tower structure in Stereoscopic 3D as opposed to a 2D layout.

INTERFACE

We have created a mock-up for the interface and built a tower structure for the film 'Gladiator'. The structure was built in accordance to the data on IMDB which included the dates and the 9 most important actors in the movie. Flash was used to build the interface and we can add animations into it as well. The 3D model was then egged to be exported into Panda to see how it would look in stereoscopic 3D.

We believe that this 'tower' interface will help to show how Stereoscopic 3D can add value to different types of data visualization. Adding a third dimension can make it easier to navigate through the data in a new and more immersive way.
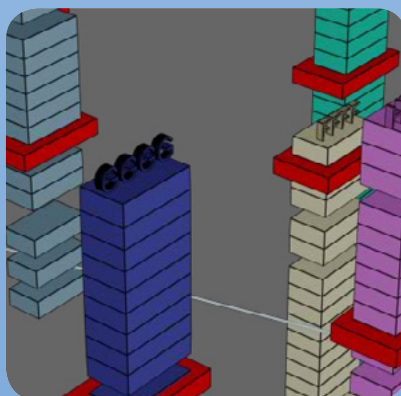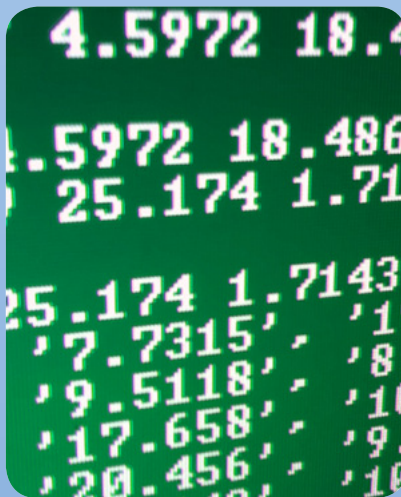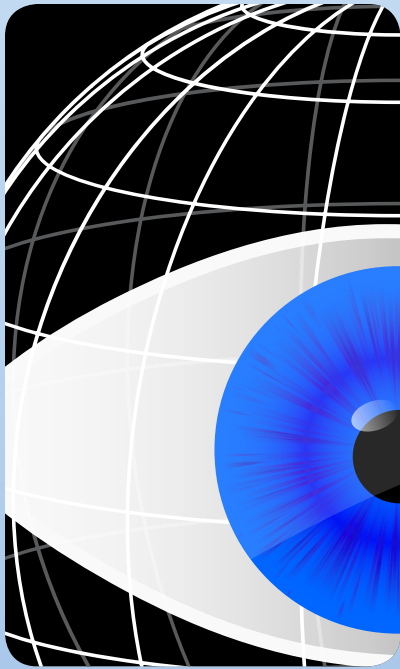
PROJECT UPDATES

The first update from this past week is our new Task Scheduler. This system helps us to know, from week-to-week, what specifically needs to be done for the project. We are able to see the task, the date, and whether it is pending, in progress, or completed. This system is already proving to be valuable to the group. We feel much more organized now that we are able to look at the whiteboard in our room and get a better feel on where we stand with the project.

We also made extensive updates to the website including three new pages. There is now an 'Updates' page, where our team will post project updates several times a week. There is a 'Newsletter' page where we have archived all of our weekly newsletters so that anyone can access the site and download past issues. There is also a 'Media' page where we will post videos and pictures including our 10-second promo which we posted yesterday.

Our group is working on building the powerpoint presentation which will be showcased at the BVW show at the end of the semester. This presentation will be a great way to show off our project to the audience that attends the show.
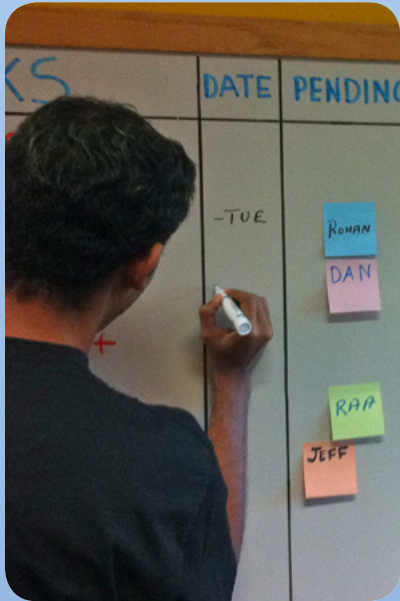
TEAM EVENTS

We had several team events this week including attending a project relevant seminar on campus. It was very informative and it was specifically geared towards data visualization. We had the chance to talk personally to Jeremy, who was the presenter, and asked him about his thoughts on 3D stereoscopic data viz. He had several opinions and ideas for us. He also is very open to us emailing him for ask him some further questions. I think this will prove to be very valuable to our project.

We also hosted a group from University of Salford in England yesterday. They were able to come to our project room and learn a little more about what we are doing this semester. The group seemed to get exactly what we are doing and they understood how it may benefit data visualization.

To cap-off this week we had a team dinner to take a break from the busy week and get together in a more informal atmosphere. We all thought that it proved to be valuable to the group and will help improve our teamwork.
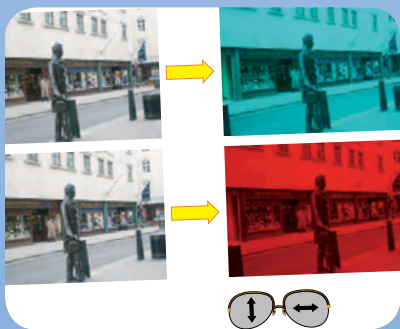
CHALLENGES / CONCERNS

- Will it be an issue that the entire audience will not be able to see our 1/2 presentation in Stereoscopic 3D?

- Is there an alternative way to present at finals where all audience members can view our project in Stereoscopic 3D?

- We need to find specific tasks for user testing.