CS 151 Project – Dr. Kim

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Google Calendar Report

We had to apply several key concepts from this course in order to successfully complete the project.

Firstly, we had to obviously make use of Use Cases, Noun/Verb Analysis and UML Class diagrams in order to determine which classes and files would be required and the responsibility of each member. Examples of these can be seen as included in this report.

From Chapter 4, we had to incorporate interfaces, polymorphism, anonymous classes and GUI Programming. The interfaces were handy when trying to factor out common methods between all the different views, and polymorphism is used to determine which view the user is currently viewing. Anonymous classes are used for event handling and action listeners on buttons throughout the program. Lastly, GUI programming is used in order to provide a rich, graphical interface to interact with the user.

From Chapter 5, we used the MVC and strategy design patterns to ensure high cohesion and low coupling between all the different components of the Google Calendar. Each view has its own class file, with a controller that extends the main controller. The main controller holds the methods that are common to every view, and leaves it to each individual controller to expand on these definitions. The events class serves as the model and houses all the data, updating the registered listeners whenever a change occurs.

While all these key topics from the course were enough to get our group started on this project, there were several components that we had to learn for ourselves; all of these had to do with displaying data a certain way (ie. GUI representation).

The day view makes use of JTables in order to display the events at specified hours of the day. The week view as well makes use of these same tables. In order to use these tables, we had to determine how to color certain rows if an event was scheduled at the time, etc.

We also had to learn how to create a “pop-up” frame when the “create” button is clicked. As it turns out, it’s as easy as showing the appropriate smaller window when the create button is clicked, and on successful completion, hiding/disposing of the frame.

Our group feels that the topics of this class were sufficient and helpful in completing the assignment for minimum project specifications. We could have even gotten around learning how to use JTables if we so chose at the time. No new concepts were absolutely necessary in order to complete the Google Calendar so long as all group members had a good grasp of the materials from lecture.