CS 444 Group 4 Final Project Inception Document

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**Project Introduction**

Our group’s goal is to create an application that University faculty can utilize to create a class schedule by importing a document that has a class schedule from a previous year and inputting the start date for the upcoming semester and the application will create a class schedule by updating the dates to the appropriate dates for the upcoming semester.

**Functional Requirements**

1. The user is prompted to load a file containing schedule information.
2. The user imports/loads a past schedule that contains text for each meeting time in a course schedule/list of important dates for a college course.
3. The user inputs semester term start-date and end-date.
4. The user inputs a list of days of the week that the class meets and the start-times and end-times of those meetings.
5. The user inputs special meeting dates and times that are not in the regular meeting times, for example, a field trip or required out-of-class activity.
6. The user creates a set of holidays and days when classes don’t meet during the schedule.
7. Program computes schedule and exports a text file of the upcoming course schedule which assigns a date to each class session on the schedule.
8. If a course meets on multiple times during the same date, the list accounts for that.
9. When the number of class sessions and the number of meeting dates/times are not equal, the user is prompted for a strategy to resolve the issue. Strategies need to deal with situations when there are more meeting dates than session descriptions, and more session descriptions than meeting dates.
10. User shall be able to cancel the current schedule and start from the beginning.
11. User will be prompted for a name and location to export the new text file.

**Non-functional Requirements**

1. The user shall see computed schedule in under 15 seconds.
2. The software shall be written in Java.
3. The software shall have a GUI interface.
4. The GUI shall give user feedback at different stages of the process. For example, the GUI will indicate that the file is being saved and where it is being saved.
5. User shall be able to preview the document before exporting or saving it.

**User Experience**

1. Buttons shall be easy to read.
2. The interface shall have a white background with black text.
3. The interface font shall be in Times New Roman.
4. Users shall have access to standard menu bar items including closing the window, copying, pasting, and quitting the program.
5. User should be able to drag and drop text into text fields.

**Key Features**

Key features include

* input field for semester start date
* input field for semester end date
* a button to create upcoming semester schedule. These inputs would generate a new schedule file.

**System Architecture**

The java program shall create a GUI interface. The GUI interface shall have an input field for semester start date. The GUI shall have a button to load a file, and that file will contain a schedule from a past semester. The GUI shall have a button to create upcoming semester schedule. The GUI shall have a text field, and once the create upcoming semester button is clicked, the GUI shall display the upcoming semester course schedule in the text field.

**Use Case Model**