Scheduler Requirements

# Purpose of This Document

This document details what Team Apple will implement in GGC’s Scheduler for professors and administrators. Implemented features are meant to automate GGC’s currently manual Scheduler in order to make the process more efficient and to ensure professors are most satisfied with the times and courses they teach.

# Functional Requirements

|  |  |
| --- | --- |
| **Priority Key** | |
| **Key** | **Description** |
| H | High |
| M | Medium |
| L | Low |

|  |  |  |
| --- | --- | --- |
| Name | Justification | Priority |
| AU001 | An authenticator must be implemented to only allow verified professors to be logged in as professors and verified administrators to be logged in as administrators. | L |
| AU002 | The password field for the login must be encrypted. | L |
| AU003 | Administrators must have a separate view from professors. | M |
| AU003 | It must be possible for administrators to be added to the system. | M |
| PR001 | Professors must be able to search for courses with the options of: Course number, Department, Course title, and Days and time of course. | H |
| PR002 | Professors must be able to allocate a set number of points towards the courses they want. | H |
| PR003 | Professors must be able to edit preferences of the courses they want. | H |
| PR004 | Preferences must be fixed. | H |
| PR005 | Professors must be able to add times they are available. | H |
| PR006 | Professors must be able to add times they are not available. | H |
| PR007 | Professors must be able to access a calendar schedule. | H |
| PR008 | The hours of professors instruct must be kept track of. | H |
| PR009 | Professors must be provided information of the initial professor that already has a preferred time they want so both can discuss how to resolve their conflicting timeslots. | M |
| AD001 | Administrators must be able to add and remove courses and sections. | H |
| AD002 | Administrators must be able to use a simple filter using course number and sections. | M |
| AD003 | Administrators must be able to use a complex filter using a course’s: Course Registration Number, Title, Section, Time and day, Class number, and Instructor | L |
| AD004 | Administrators must be able to see a professor’s total hours of teaching based on the classes the professor registered for. | H |
| AD005 | Administrators must be able to upload classes into Microsoft Excel. | M |
| AD006 | Administrators must be able to download classes from Microsoft Excel. | H |
| AD007 | Administrators must be able to download professor data from Microsoft Excel. | H |
| AD008 | Administrators must be able to control entire sections of course data. | L |
| AD009 | Administrators must see overlaps within the calendar schedule. | M |
| AD010 | Visual filters must be implemented to show which classes have conflicts and which do not have conflicts. | L |
| AD011 | Administrators must see which classes are empty and which professors are available at those times. | M |

# Non-Functional Requirements

|  |  |  |
| --- | --- | --- |
| Name | Justification | Priority |
| NR001 | A webpage that has working graphics of the schedule database and the actual schedule must be implemented before September 17th. | H |
| NR002 | A webpage that implements functional requirements must be implemented before October 8th. | H |
| NR003 | The final product must be implemented before November 5th. | H |
| NR004 | The Scheduler must be scalable, meaning it must have a simple and easy to modify database data. | M |
| NR005 | Professors and administrators must be able to use the interface easily and have access to help info bubbles that explain features to them so it becomes easier for them to use the Scheduler. | M |
| NR006 | There must not be duplicate data. | H |
| NR007 | The webpage must at least run on major web browsers. | H |
| NR008 | The Scheduler must refresh calendars and classes to professors and administrators every 30 or 60 seconds. | H |

# Domain Requirements

|  |  |  |
| --- | --- | --- |
| Name | Justification | Priority |
| DR001 | Database Statistics must be kept track of. Information included are: The most congested course times, Most preferred availability of professors, and the number of professors. | M |
| DR002 | GGC’s information of their professors, administrators, and courses must be implemented into the system. All important data necessary for implementation of the Scheduler must be included.  Course information includes: Course registration number (CRN), Department, Course number, Course title, Section number, Days and time the course is taught, Classroom number, and Instructor  Professor/Administrator information includes: Email, Name, number of hours instructing, Schedule of registered courses (Courses professor will be instructing, section number of course, days and time of course, and classroom course is located in) | H |