

Software Requirements Specification

Team:

Project Title: Schedule Works

Members:

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Meetings date	Participants
01/27/2023	Mazen, Mizanul, Aafnan, Christopher, Faizan
01/29/2023	Mazen, Mizanul, Aafnan, Christopher, Faizan

Stakeholders	Requirements
Users	FR1: User login dashboard FR2: List of the user's schedules FR3: Notification System for changes FR4: Merge multiple schedules FR5: Display information for each class FR6: Inputting and storing prior classes FR7: Displaying what classes can't be picked together FR8: Input menu specifying number of credits per semester FR9: Rating system for schedules FR10: Generate future schedules FR11: Save user schedule information

	FR12: Input menu for the user's available days and times FR13: Filtering options for user's schedule Input menu for classes users would like to filter out FR14: Website workflow after users log in FR15: Allow users to report issues within the website NR5: The system should be accessible at all hours of the day
System	FR15: Allow users to report issues within the website NR2: Schedule should be generated in under 60 seconds NR3: Should run smoothly on Windows
Wayne State University	NR4: Wayne State color palette
All	NR1. Sensitive information authorization

FR1. User login dashboard
Goal: The user will be able to enter in their login and password and view their information.
Stakeholders: Users
When the user logs in to the site, they will be able to view their class ranking, what year they are in, and what schedules they have currently (listed in numerical order or dependent on semester chosen). This feature of the system will just be a simple display, that can display information regarding the student prior to making a schedule.

Origin: While discussing what was needed in the first meeting, this requirement was brought up during the meeting as a useful feature that would assist users.

Version: 1.0

Date: 01/27/2023

Priority: 1

FR2. List of the user's schedules

Goal: The system will provide users with the list of schedules that they have presently available to them, which is done after creating it.

Stakeholders: Users

When the user is on the dashboard after logging in, they will be able to view which schedules they have in an organized list. Users will be able to rename and reorganize the list according to their wishes. This feature will only be present to users after the system creates their personalized schedules, following their input.

Origin: Based on initial project specification document, team members produced this description during the first meeting.

Version: 3.0

Date: 01/27/2023

Priority: 11

FR3. Notification system for changes

Goal: The system present on the dashboard will present the user with any information regarding classes, and whether any modification of their schedule is needed.

Stakeholders: Users

Users will be able to see notifications on whether any classes they had were deleted, modified, or if any classes were added to a semester, which they can apply to their own schedule(s). Furthermore, if any classes are deleted, the system will show a notification on the dashboard.

Origin: Following the initial presentation, we received feedback and decided to implement this after discussing it in the meeting.

Version: 3.0

Date: 01/27/2023

Priority: 12

FR4. Merge multiple schedules

Goal: This feature will allow users to merge any two or more schedules and create a new schedule out of all the classes they have on other schedules.

Stakeholders: Users

Users will be able to merge any schedules they have in their list into one newly created single schedule. This system will show any time overlap that will prevent this, offer students the ability to delete classes, and will place classes into open and available time slots that were requested during the initial creation from the user filtering it out.

Origin: Based on initial project specification document, team members produced this description during the first meeting.

Version: 1.0

Date: 01/27/2023

Priority: 2

FR5. Display information for each class

Goal: The system will provide the user with the Time of the class, what days it will be available, and where it will be available.

Stakeholders: Users

The user will be able to access the information regarding the classes such as its time, day and location. It is important for this information to be available and shown as a display mainly because it will rely heavily on the schedule making plan of our project.

Origin: This was discussed in the beginning of the project and in our presentation as well.

Version: 1.0

Date: 01/27/2023

Priority: 3

FR6. Inputting and storing prior Classes

Goal: The function of this will be to input any classes that a user has taken previously that might not appear on ScheduleWorks.

Stakeholders: Users

The User will be able to input if he or she has completed some classes prior to the schedule generation. This can include classes a user has taken at a community college or AP classes taken during high school.

Origin: Our group discuss the purpose of prior class and this function arose from it.

Version: 2.0

Date: 01/27/2023

Priority: 10

FR7. Displaying what classes can't be picked together

Goal: Users will see what classes cannot be picked based on factors like prerequisites and time conflicts.		
Stakeholders: Users		
Certain classes might not be able to be taken together in the same semester due to multiple factors. These include classes that cannot be taken together due to one class requiring the other as a prerequisite first, and classes that have time conflicts.		
<u>Origin:</u> Discussed after presentation and it highlights the importance of our project.		
<u>Version:</u> 1.0	<u>Date:</u> 01/27/2023	<u>Priority:</u> 4

FR8. Input menu specifying number of credits per semester		
Goal: The system will ask the user how many credits they would ideally want to take in a certain semester.		
Stakeholders: Users		
Depending on factors such as full-time or part-time enrollment, in addition to how many credits a user is willing to take, users will need to be able to select the number of credits they will take. Users will be able to select this by semester through an input menu.		
<u>Origin:</u> There was a question asked during the presentation about how it can be calculated without knowing the Status of the student and that question emphasized the need for such function after discussing with the Team.		
<u>Version:</u> 2.0	<u>Date:</u> 01/27/2023	<u>Priority:</u> 9

FR9. Rating system for schedules		
Goal: The system will provide a rating for the generated schedule to convey to users how well the schedule would work given the parameters.		
Stakeholders: Users		
The user will be able to give ratings for their schedules to the Developing team directly, as the scores given for the schedules by the students will help identify which qualities worked best for the program.		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		
<u>Version:</u> 3.0	<u>Date:</u> 01/27/2023	<u>Priority:</u> 13

FR10. Generate future schedules		
Goal: The system will generate schedules for future semesters based on classes available at the time of generation.		
Stakeholders: Users		
Develop a viable 4–5-year plan with a customizable max-credit per semester option. The software will produce a semester-by-semester plan for courses to take that would outline.		
<u>Origin:</u> Based on initial project specification document, team members came up with this description during the first meeting.		
<u>Version:</u> 1.0	<u>Date:</u> 01/27/2019	<u>Priority:</u> 5

FR11. Save user schedule information		
Goal: The system must save user information so that users can view and adjust generated schedules later.		
Stakeholders: Users		
Users will be able to save their generated schedules for later viewing. In addition, they can adjust and configure their previously saved schedules. These schedules will be saved under the user's login.		
<u>Origin:</u> Based on the initial project specification document, team members produced this description during the second meeting.		
<u>Version:</u> 2.0	<u>Date:</u> 01/29/2023	<u>Priority:</u> 7

FR12. Input menu for the user's available days and times		
Goal: Users can input what days of the week and what times during each day they are available for classes.		
Stakeholders: Users		
Users will be able to select from a drop-down menu what days of the week and what times during each day that they are available, in case they have any other activities that occupy time such as jobs.		
<u>Origin:</u> Based on the initial project specification document, team members produced this description during the second meeting.		
<u>Version:</u> 2.0	<u>Date:</u> 01/29/2019	<u>Priority:</u> 6

FR13. Input menu for classes users would like to filter out		
Goal: Users will be able to enter what classes they would like to filter out for a given semester.		
Stakeholders: Users		
Users will be introduced to an input menu where they can choose which classes they would prefer not to take in each semester, and the system will take this into account when generating a schedule. The system will treat the classes as a blacklist for the semester and ignore them.		
<u>Origin:</u> Based on the initial project specification document, team members produced this description during the second meeting.		
<u>Version:</u> 2.0	<u>Date:</u> 01/29/2019	<u>Priority:</u> 8

FR14. Website workflow after users log in		
Goal: After the user logs in to the website, allow the user to view past schedules or create a new schedule.		
Stakeholders: Users		
When the user logs onto the website they will be taken to a page with the option to view past schedules or create a new schedule. Viewing past schedules will allow the user to view schedules they have made from the past that are kept in our database. Creating a new schedule will allow the user to make a new schedule using our technology. Users will have the option to produce a new 4-year schedule or to produce a current year schedule to register for.		
<u>Origin:</u> Based on the initial project specification document, team members produced this description during the second meeting.		
<u>Version:</u> 3.0	<u>Date:</u> 01/29/2023	<u>Priority:</u> 14

FR15. Allow users to report issues within the website		
Goal: Have a help button on the website that will allow users to report any issues they are having within the website.		
Stakeholders: System and Users		
A help button will be displayed on the website. If the help button is clicked on by the user, they will be taken to a page where they will be able to follow a process to report issues to the GitHub "Issues" page.		
<u>Origin:</u> Based on the initial project specification document, team members produced this description during the second meeting.		
<u>Version:</u> 3.0	<u>Date:</u> 01/29/2023	<u>Priority:</u> 15

NR1. Sensitive information authorization		
Goal: Users cannot access sensitive information without authorization.		
Stakeholders: All		

With this, we will ensure user information is kept secure and private. Only those with access will be given access to any sort of sensitive information for the users. Schedules of students will be kept private and secure.

Origin: Based on the initial project specification document, team members produced this description during the second meeting.

Version: 1.0

Date: 01/29/2023

Priority: 1

NR2. Schedule should be generated in under 60 seconds

Goal: The system will generate a schedule in under 60 seconds of pressing the button to generate a schedule.

Stakeholders: System

The system will be able to create a schedule upon entering the filters and will be created within 60 seconds. After this time, a schedule will be created that is based upon what the user had entered.

Origin: Based on the initial project specification document, team members produced this description during the second meeting.

Version: 1.0

Date: 01/29/2023

Priority: 2

NR3. The website should run smoothly on Windows

Goal: The system should run without stuttering or lagging for more than 10 seconds besides while generating schedules.

Stakeholders: System		
When a user is accessing information or moving between pages, the system should not lag for more than 10 seconds during any requests that are not generating new information. Information brought up such as viewing older schedules should be viewed in under 10 seconds. Expected lag or stuttering should be dealt with by providing a loading screen rather than a still screen.		
<u>Origin:</u> Based on the initial project specification document, team members produced this description during the second meeting.		
<u>Version:</u> 2.0	<u>Date:</u> 01/29/2023	<u>Priority:</u> 4

NR4. The color palette used should fall in line with Wayne State's colors		
Goal: The color pallet should use the same colors as Wayne State's other systems.		
Stakeholders: Wayne State University		
When a user is interacting with the software, the colors and style used should be professional/fall in line with Wayne State. The green shall be HEX - #0C5449 and the gold shall be HEX - #FFCC33.		
<u>Origin:</u> Based on the initial project specification document, team members produced this description during the second meeting.		
<u>Version:</u> 3.0	<u>Date:</u> 01/29/2023	<u>Priority:</u> 5

NR5. The system should be accessible at all hours of the day		
Goal: The software should be available to use during all hours of the day and if registration is open.		

Stakeholders: Users		
A user should be able to generate a new schedule during any hour of the day. It should be independent of the registration system and only offer a schedule that the user can manually register for.		
<u>Origin:</u> Based on the initial project specification document, team members produced this description during the second meeting.		
<u>Version:</u> 2.0	<u>Date:</u> 01/29/2023	<u>Priority:</u> 3