Assignment 2: Software Requirements Specification

Team: DegreeScheduler

Project Title: Assignment 2 – Software Requirements Specification

Members:

1. Ciah Green
2. Kasseem Faraj
3. Ryan Kaszubski
4. Santhra Thomas
5. Visshrutha Velumani

Meetings date	Participants
01/29/2021	Ciah Green, Ryan Kaszubski, Santhra Thomas, Visshrutha Velumani
01/31/2021	Ciah Green, Kasseem Faraj, Ryan Kaszubski, Santhra Thomas, Visshrutha Velumani
02/02/2021	Ciah Green, Kasseem Faraj, Ryan Kaszubski, Santhra Thomas, Visshrutha Velumani

Stakeholders	Requirements
Computer Science Students	FR1: Log in Page… FR2: Menu Function for Navigation… FR3: Search by Course Name… FR4: Search by Course Number… FR5: Search by Availability (courses open/ full)… FR6: Search by Credits of Choice… FR7: Search by the Professors… FR8: Search by Level… FR9: Search by Date… FR10: Search by Time…

	FR11: Search by Semesters...
	FR12: Search by Majors...
	FR13: Search by Filters...
	FR14: Toggle Feature to Indicate the Grade Status...
	FR15: Downloading and Sharing Schedule...
Computer Science Faculty	FR16: Contacting students with advice...
Administrators/ Engineers maintaining the system	NR1: Security...
	NR2: Privacy policy...
	NR3: Usability...
	NR4: Availability...
	NR5: Performance...
	NR6: Reliability...

FR1. Log in Page

Goal: The system will give the user a page that the user would log in with their Wayne State University access id so that they could save the schedule under their account.

Stakeholders: Computer Science Student

This would be the first page to show up when the app is opened by the user. This page will prompt user to input his/her Wayne State University access id. After the student have logged in using both his or her access id, the page would greet the user with a selected message with their respective name assigned to their access id. We will be currently only focusing on the students in our class, so the app will only recognize the access id if the students present in our class. We will be using a table that would contain both the information on access id and the name associated with it, which will be referred to when the welcome message would be displayed. Alternate case: When the user fails to put an access id accordingly to the certain and display a pre-selected message asking the user to input the access id in that forms.

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

Version: 1.0	Date: 01/31/2021	Priority: 1

FR2. Menu for Navigation UI

Goal: The system will give the user a menu bar that would help the user navigate throughout the app.

Stakeholders: Computer Science Student

After the user is logged in using the Wayne State University access id. The user would be taken into a page where he/ she would have to choose one of the options from the menu bar to navigate throughout the app. This menu bar would have contents like create a new schedule, contact the advisor, view the existing schedule, update the current schedule, and register for classes. After clicking one of the options from the menu bar the user will be directed to a page which is related to the topic of choice from the menu bar. For example: If user clicks the option contact the advisor option from the menu bar then the user will be directed to the outlook that would be used to contact the advisor. Worst case scenario: If the user clicks on the wrong buttons from the menu bar and sent to a different page, he/she will have an option to go back to the menu bar when he/she opens the app again.

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

Version: 1.0	Date: 01/31/2021	Priority: 1

FR3. Search by Course Name

Goal: This will allow the user to search a course by name

Stakeholders: Computer Science Student

When the user wants to search for a course, they can simply search up the name of the course they want. If courses are found, they will be displayed to the user, if not nothing will be displayed to the user. The user can add or view details about each class that appears. Multiple classes can appear based off what the user searched.

Origin: Based on initial project specification document, team members came up with this description during the second meeting.		
Version: 1.0	Date: 01/31/2021	Priority: 1

FR4. Search by Course Number		
Goal: Allow the user to find a course by its number.		
Stakeholders: Computer Science Student		
When a user wants to search for a specific course, they can look it up by the course number. This will allow the user to find the exact course they want. The user can add or view details about the class that appears. The specified class will be the only class that appears. If no class is found, no classes will be showed.		
Origin: Based on initial project specification document, team members came up with this description during the second meeting.		
Version: 1.0	Date: 01/31/2021	Priority: 1

FR5. Search by Availability (courses open/ full)		
Goal: This Will Allow The User To Search For Availability Of The Course.		
Stakeholders: Computer Science Student		
When a user searches for a specific course, this will allow them to only view courses that are open and add it to their schedule accordingly. By displaying only the open courses computer science student would have an easier time scheduling their classes, this would also help avoid scheduling a class that the student can't register for. If no classes are available an error will occur stating that no classes were found.		
Origin: Based on initial project specification document, team members came up with this description during the second meeting.		

Version: 1.0	Date: 01/31/2021	Priority:4

FR6. Search by Course Credits UI

Goal: To have the user to be able to look up courses based on inputting their preferred credits for a class

Stakeholders: Computer Science Student (User)

After the user has chosen to register for classes from the menu bar, he or she will be directed to this page to register for classes. In the app, the user will be able to search by the number of credits he/she wants and see what classes are available that match the number of credits chosen. If no courses are available for the specified credit, an error message will occur asking the user to choose another credit option or exit.

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

Version: 1.0	Date: 01/31/2021	Priority: 4

FR7. Search by Professor UI

Goal: To have the user to be able to look up what they need by professor. Rather it be for a class, or information to contact a professor.

Stakeholders: Computer Science Student (User)

After the user has chosen to register for classes from the menu bar, he or she will be directed to this page to register for classes. In the app, the user will be able to search by professor and see what classes he/she will be teaching for that semester. This would give the user an opportunity to choose courses mentioned in his/her schedule that corresponds to the professor of his/her choice.

The app would also use warning message or error message that would help guide the user to use the tools accurately. For example: if the professor is no longer at Wayne State, the user would get a message letting them know that there is no information on that professor, try again.

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

Version: 1.0	Date: 01/31/2021	Priority: 6

FR8. Search by Level

Goal: To help users search for classes by their current academic level.

Stakeholders: Computer Science Student

This option helps the users search for classes offered only to their specific academic level, when speaking about academic level meaning for example some classes are only offered or needed for seniors while others are only offered or needed for freshman's.

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

Version: 1.0	Date: 01/31/2021	Priority:6

FR9. Search by days UI

Goal: To have the user be able to look up what classes are offered on that/ those days.

Stakeholders: Computer Science Student (User)

After the user has chosen to register for classes from the menu bar, he or she will be directed to this page to register for classes. In the app, the user will be able to search by days and see what classes are available for that particular semester. Being that students have other obligations rather its being a parent or having a job this feature will help them make a schedule quickly.

The app would also use warning message or error message that would help guide the user to use the tools accurately. For example: if there are no day(s) selected, the user would get a message letting them know they need to select at least one day.

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

Version: 1.0	Date: 01/31/2021	Priority: 2

FR10. Search by time UI

Goal: To have the user be able to look up what classes are offered on that/ those particular times

Stakeholders: Computer Science Student (User)

After the user has chosen to register for classes from the menu bar, he or she will be directed to this page to register for classes. In the app, the user will be able to search by the time and see what classes are available for that particular semester. Being that students have other obligations rather its being a parent, or having a job this feature will help them make a schedule quickly. For example: this app would help the student register to class giving more consideration to their schedule availability that could be filled with factors such as internships, job or any other commitments.
The app would also use warning message or error message that would help guide the user to use the tools accurately. For example: if there are no time selected, the user would get a message letting them know they need to select a time

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

Version: 1.0	Date: 01/31/2021	Priority: 2

FR11. Search by Semesters

Goal: To help users look up classes by the semester in question.

Stakeholders: Computer Science Student
While searching for classes this give the user the option to search for specific classes for the current and future semester, whit allowing the user to do so this will help them plan their schedule accordingly and take what classes are currently available that will not be available in the upcoming future semesters. If a class is not offered an error message will occur stating that no classes are available.
Origin: Based on initial project specification document, team members came up with this description during the second meeting.

Version: 1.0	Date: 01/31/2021	Priority: 1

FR12. Search by Major UI
Goal: The system will give the user an opportunity to search the classes based on the choice of the major.
Stakeholders: Computer Science Student
After the user has chosen to register for classes from the menu bar, he or she will be directed to this page to register for classes. When the student is planning to view his or her schedule, he or she has an option to choose his/her major, which is currently going to only going to focus on the Computer Science major. This could help him/ her choose classes that is intended for that specific major. The app would suggest the classes that is assigned to the chosen major, when it comes for the student registration. The worst-case scenario: In this app we are only focusing on computer science major students, we are assuming that the students in the class are majoring in computer science so the schedule would only show the courses of computer science major.
Origin: Based on initial project specification document, team members came up with this description during the second meeting.

Version: 1.0	Date: 01/31/2021	Priority: 1

FR13. Search by Filters UI

Goal: To have the user to be able to look up courses based on choosing any combinations of the above options and filtering out the courses they need.
Stakeholders: Computer Science Student (User)
After the user has chosen to register for classes from the menu bar, he or she will be directed to this page to register for classes. In the app, the user will be able to search by any combination of the above features. They can be able to generate a list of courses that result from a combination of choosing course name, course number, availability, credits, professors, level, date, time, semesters, and / or major. If no courses are available for a specific combination of filters, an error message will occur stating so and will also ask you to choose another combination of filters or exit.
Origin: Based on initial project specification document, team members came up with this description during the second meeting.

Version: 1.0	Date: 01/31/2021	Priority: 2

FR14. Toggle Feature to Update Grade Status
Goal: To have the user to be able to input their semester letter grades for a course using a drop-down toggle.
Stakeholders: Computer Science Student (User)
After the user have chosen to update grades from the menu bar, he or she will be directed to this page to update the courses in which they've received a letter grade in. In the app, the user will be able to search up the courses they took previously took, then click a drop-down toggle list consisting of all possible letter grades to choose from in order to update the grade they received in the course. This allows for the app to better filter out classes based on your performance and to help show the user if they are set to move on to the next course. If the user failed to update grades for courses that are pre-requisites, a reminder message will occur stating that they need to do so before adding other classes.
Origin: Based on initial project specification document, team members came up with this description during the second meeting.

Version: 1.0	Date: 01/31/2021	Priority: 1

FR15. Download and Share schedule
Goal: Allow the user to download and share their schedule.
Stakeholders: Computer Science Student
After the user creates their schedule or class list, they can have the option to download and/or share their schedule with others. The user must have a saved schedule to download/share it. The schedule will be a simple format that most others can see.
Origin: Based on initial project specification document, team members came up with this description during the second meeting.

Version: 1.0	Date: 01/31/2021	Priority: 6

FR16. Contacting students with advice
Goal: The counselors would be able to view the email with a copy of the students schedule to give any advice or suggestion regarding it.
Stakeholders: Computer Science Faculty
When the computer science students choose to contact the advisor by choosing the contact your advisor from the menu bar. The counselors could use email to clear any doubts or suggest anything that student have that concerns with his/ her respective schedule. Counselor could also choose to view the uploaded schedule, if one is provided by the student. The counselor could also seek the student for the schedule if it is not provided already. Counselor could use this method to see the current plan of that student and help them with any override for a class or update the Ellucian Degree works according to it. It would be an easier way for them to assist the student if the schedule is already provided. Worst case scenario: There be an error in connecting to the outbox to send the email, then we would be sending a pre-selected error message advising the user to close the app and try again.

Origin: Based on initial project specification document, team members came up with this description during the second meeting.		
Version: 1.0	Date: 01/31/2021	Priority: 1

NR1. Security		
Goal: Keep information offline unless user agrees to share.		
Stakeholders: Administrators/ Engineers maintaining the system		
To keep the information secure, the system will not collect or share data to the developers. However, the user can optionally share their schedule. If the user wishes to send their schedule, the schedule will be the only thing sent to another user. All other data is kept offline on the app.		
Origin: Based on initial project specification document, team members came up with this description during the second meeting.		
Version: 1.0	Date: 01/31/2021	Priority:1

NR2. Privacy Policy	
Goal: To have the user to be able to have access to the privacy policy of this app in order to be better informed of their privacy, their rights, what the app shares, reads, and stores, and how it will keep user information safe and secure.	
Stakeholders: Administrators/ Engineers maintaining the system	
When looking at the users' privacy regarding the app, the personal information recorded during use consists of their grades when updating, their personalized schedules, their search history, and their downloadable / sharable version of their schedules. This information will only be recorded will the app is in use and will not be shared, marketed, or sold to other parties. Regarding the computer science faulty information that will be stored in the app, this information is pulled from the Wayne State's registrar database, which is already open to the Wayne State Community. Thus,	

it will also not be shared, marketed, or sold to other parties. The user will be provided with an agreement in which he / she has to agree to first before she can use the app, which essentially outlines the above information and gives consent to the app to store user information.

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

Version: 1.0	Date: 01/31/2021	Priority: 1

NR3. Usability

Goal: To help the user use the app more comfortably and the features used in the app are simple. User should be able to successfully learn to operate it, prepare the inputs and comprehend the output.

Stakeholders: Administrators/ Engineers maintaining the system

When choosing the theme of the app, we would consider usage of colors that is easier to interpret for the users with color blindness. The system should always keep the users informed about what is going on through appropriate feedback within a reasonable time. The app would be aesthetic and have minimalist design that would contain concise text with relevant text. It will have menu bar that would make navigating through the app easier, and choice box that would be direct and easier to use. The app would also use warning message or error message that would help guide the user to use the tools accurately. For example: There would be a message asking the user for updating the grades after each semester end. Worst case scenario: If the users find the theme to be distracting, having trouble with any feature, or have any feedback on the usability of the app he/she could contact the administrator.

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

Version: 1.0	Date: 01/31/2021	Priority: 1

NR4. Availability

Goal: Indicate up to which degree the app would be both accessible and operational

Stakeholders: Administrators/ Engineers maintaining the system
They need to make sure that the app is available and operational for the user to use it whenever he/she wants. Even though the degree of the availability will vary depended on the system. We must make sure the degree of the availability is 99.99%. The user will not have access to the app when the app undergoes updates to fix any bugs present, without losing any stored information. Worst-case scenario: If the app is facing any trouble like not opening or lost the stored data. Users could feel free to contact the administrators to fix the trouble, and if they have downloaded the schedule they could refer to it to create a new schedule.
Origin: Based on initial project specification document, team members came up with this description during the second meeting.

Version: 1.0	Date: 01/31/2021	Priority:1

NR5. Performance
Goal: To ensure the server, network and programming are at optimal level.
Stakeholders: Administrators/ Engineers maintaining the system
The goal is to make the app as fast and accurate as possible while utilizing as little memory as possible. Although not all user will have a pleasant experience with the app it does not mean that it lacks satisfactory performance. If the app is slow and lagging, they can always contact the administrator and report the bug.
Origin: Based on initial project specification document, team members came up with this description during the second meeting.

Version: 1.0	Date: 01/31/2021	Priority:1

NR6. Reliability
Goal: To have the app unfailing making sure that everything goes smoothly. Making sure that the app is responding in a timely manner, the app is responding correctly.
Stakeholders: Administrators/ Engineers maintaining the system
Making sure the application is dependable for the users. Taking the time to make sure all the features such as buttons work, and the input(s) from the user is getting saved correctly. Making sure the user(s) can access the app without any issues and making it user friendly. The app would also use warning message or error message that would help guide the user to use the tools accurately. For example: if the app is not responding because the user doesn't have internet connection, it will show a message that says no internet connection, try again.
Origin: Based on initial project specification document, team members came up with this description during the second meeting.

Version: 1.0	Date: 01/31/2021	Priority: 1