



CSC 431

Focus Time

Software Requirements Specification (SRS)

Team #14

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Version History

Version	Date	Author(s)	Change Comments
1.0	2/17/22	Felipe Flores Tianyu Ma Wen Li	First draft

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1. System Requirements

1.1 Functional Requirements

1.1.1 Sign-up for account

Title	Sign-up
Description	Form that allows users to create an account
Priority	0
Precondition(s)	The user downloads the application The user opens the application
Basic Flow	<ol style="list-style-type: none">1. User presses the create an account option2. Sign-up form opens3. User enters their details (username, email, password)4. User binds their email to the account5. Save the user's details to the database6. User is directed to the login page
Postconditions(s)	User account creation is complete User is directed to the login page User can now access all features of the application

1.1.2 Log-in to existing account

Title	Log-in
Description	Form that allows users to sign into their existing account
Priority	0
Precondition(s)	The user has opened the application The user has a pre-existing account
Basic Flow	<ol style="list-style-type: none">1. User presses the log-in option2. Log-in form opens3. User enters their details (username/email, password)4. User presses the "Sign-in" option5. Validation occurs
Postconditions(s)	User is directed to the home page If the user's details are inaccurate to the account, repeat If the user clicks "Forget password", direct to password reset page

1.1.3 Password Reset

Title	Password Reset
Description	Form that allows users to reset their password
Priority	0
Precondition(s)	The user has opened the application The user has a pre-existing account
Basic Flow	<ol style="list-style-type: none">1. User presses the "Forgot Password?" option2. send verification to user's email3. Users enter verification code to reset password
Postconditions(s)	User is directed to the log-in page

1.1.4 Creating TimeSets

Title	Creating TimeSets
Description	Form that allows users to create their own TimeSets
Priority	0
Precondition(s)	The user has opened the application The user has a pre-existing account The user is in the HomePage
Basic Flow	<ol style="list-style-type: none">1. User presses the "My TimeSets" option2. User is presented with a form that presents the following options: "Create TimeSet", "Saved TimeSets", "Share TimeSet", and "Delete TimeSet"3. User presses the "Create TimeSet" option4. User is presented with a page that presents the following: "Name", "Work Period", "Short Break Period", "Long Break Period", "Music"5. User customizes each option respectively6. User presses the new Confirm option that only appears when the user has customized all the options with the exception of the music option
Postconditions(s)	User is directed to the form where they originally selected to create a TimeSet A new TimeSet is successfully created and saved in "Saved TimeSets", linking it to the User's account The new TimeSet is set to private in viewability by default

1.1.5 Access Saved TimeSets

Title	Access Saved TimeSets
Description	Form that displays and allows access to all the currently saved TimeSets tied to the User's account
Priority	0
Precondition(s)	The user has opened the application The user has a pre-existing account The user has an existing TimeSet The user is in the HomePage
Basic Flow	<ol style="list-style-type: none">1. User presses the "My TimeSets" option2. User is presented with a form that presents the following options: "Create TimeSet", "Saved TimeSets", "Share TimeSet", and "Delete TimeSet"3. User presses the "Saved TimeSets" option4. User is presented with a form that displays all their saved TimeSets and allows them to select which TimeSet to use5. User selects TimeSet6. User is presented with a page showing the current timer running (so they can start working), music that is being played, and an optional stop button to exit the current TimeSet
Postconditions(s)	User now has a link to their TimeSet that they can distribute Second User receives the link and saves the TimeSet to their account

1.1.6 Sharing TimeSets

Title	Sharing TimeSets
Description	Form that allows users to share a TimeSet of their choice
Priority	1
Precondition(s)	The user has opened the application The user has a pre-existing account The user has an existing TimeSet The user is in the HomePage
Basic Flow	<ol style="list-style-type: none">1. User presses the "My TimeSets" option2. User is presented with a form that presents the following options: "Create TimeSet", "Saved TimeSets", "Share TimeSet", and "Delete TimeSet"3. User presses the "Share TimeSet" option4. User is presented with a page that allows them to either share the TimeSet through a link or set the TimeSet viewability to public5. If the link option is selected, a link is generated and copied to the clipboard of the User6. If the viewability option is selected, the TimeSet viewability is set to public
Postconditions(s)	User now has a link to their TimeSet that they can distribute or the viewability of their TimeSet is set to public

1.1.7 Delete TimeSets

Title	Delete TimeSets
Description	Form that allows users to delete a TimeSet of their choice
Priority	0
Precondition(s)	The user has opened the application The user has a pre-existing account The user has existing TimeSets The user is in the TimeSets page
Basic Flow	<ol style="list-style-type: none">1. User presses the "My TimeSets" option2. User is presented with a form that presents the following options: "Create TimeSet", "Saved TimeSets", "Share TimeSet", and "Delete TimeSet",3. User presses the "Delete TimeSet" option4. User is presented with a form that displays all their saved TimeSets and allows them to select which TimeSet to delete5. User selects TimeSet6. User presses the new Confirm option that only appears when the user has selected a valid TimeSet to delete
Postconditions(s)	User is directed to the form where they originally selected to delete a TimeSet A TimeSet is successfully deleted and removed in "Saved TimeSets"

1.1.8 Searching TimeSets

Title	Searching TimeSets
Description	Form that allows users to search public user-created TimeSets
Priority	2
Precondition(s)	The user has opened the application The user has a pre-existing account The user is in the HomePage
Basic Flow	<ol style="list-style-type: none">1. Users presses "Search TimeSets" option to open a list of other user-created TimeSets2. Users can search these TimeSets by rating, timers, and music3. A list is presented to the user that best fits their searching preference
Postconditions(s)	A list of other user created TimeSets is presented to the user The User can optionally save these TimeSets as their own

1.1.9 Account Settings

Title	Customize settings
Description	Form that allows users to customize app settings.
Priority	2
Precondition(s)	The user has opened the application The user has a pre-existing account The user is in the HomePage
Basic Flow	<ol style="list-style-type: none">1. User presses the "Settings" button to enter account setting page2. User is presented the options "Access Friends List", "Manage Account", and "Add Music"3. User can see and add friends, change their password and change their language, and add music files (MP3 or WAV) to their account from the previous options respectively4. After any of the options have been executed by the user, the user is then returned to the previous page
Postconditions(s)	The User makes their desired change to their Account Settings and is returned to the previous page

1.1.10 Friends List

Title	Friends List
Description	Form that allows users to add friends.
Priority	4
Precondition(s)	The user has opened the application The user has a pre-existed account The user is in the Settings page
Basic Flow	<ol style="list-style-type: none">1. User presses the "Friends" button to access the friends list2. User is presented with a list of friends, the option to add friends, and the option to remove friends.3. If the user presses the add button they can search existing Users by username or email4. User will receive a list of matched users5. User presses the "confirm" option to add friends.6. If the user presses the delete button they can select which friend they would like to remove from their list7. User presses the "confirm" option to delete their selected friend.8. User exits the Friends list through the exit button.
Postconditions(s)	A friend is successfully added or deleted based on the user's choice. The User has access to all of their friends TimeSets that are set to public.

1.2 Non-Functional Requirements

1.2.1 Search Result Speed

Title	Search Result Speed
Description	Search Result should be return to the user within 500 ms
Priority	0
Applicable FR(s)	1.1.8

1.2.2 TimeSet Storage

Title	TimeSet Storage
Description	Database must be able to support the storage space to allocate user data
Priority	0
Applicable FR(s)	N/A

1.2.3 Reset password requests

Title	Reset Password
Description	Help the user to reset the password when they unable to sign in or if they do not remember their password
Priority	0
Applicable FR(s)	1.1.3

1.2.4 Uptime of Application

Title	Uptime
Description	The time must be down for thirty minutes each month
Priority	3
Applicable FR(s)	N/A

1.2.5 TimeSet Data Encryption

Title	Data Encryption
Description	All data that is private in TimeSet should be encrypted
Priority	3
Applicable FR(s)	1.1.4

1.2.6 TimeSet Ranking

Title	TimeSet Ranking
Description	User can search for TimeSets based on number of likes
Priority	3
Applicable FR(s)	1.1.8

2. System Constraints

2.1 Tool Constraints

2.1.1 Mobile Application Framework

Title	Xamarin
Description	Users could access to the app in cross platform once the app is built on Xamarin
Priority	0

2.2 Language Constraints

2.2.1 Developing Language

Title	C#
Description	C# is primarily used in Xamarin for dynamic language features, functional constructs
Priority	0

2.3 Platform Constraints

2.3.1 Mobile Phone Platform

Title	Cross platform
Description	This app will support three mobile platform such as Android, IOS, and Mac
Priority	2

2.4 Hardware Constraints

2.4.1 Mobile phone requirement

Title	General hardware requirements
Description	<ol style="list-style-type: none">1. Operating system: Android 4.2 or later and MacOS 10.14. 4 or later2. Storage: Between 300 MB and 800 GB, depending on the language version3. RAM: Minimum of 512 MB, 2 GB is recommended
Priority	0

2.5 Network Constraints

2.5.1 Internet Connection

Title	minimum internet requirements
Description	App can work offline once the user has logged in. Reset password require internet connection
Priority	4

2.6 Deployment Constraints

2.6.1 Deployed Platform

Title	iPhone and Android
Description	This app would be downloadable from Google App Store and Apple App Store
Priority	4

2.7 Transition & Support Constraints

2.7.1 End of Semester

Title	End of Semester
Description	This course will end in April so the project would have to be implement during the semester
Priority	5

2.8 Budget & Schedule Constraints

2.8.1 Time Constraints

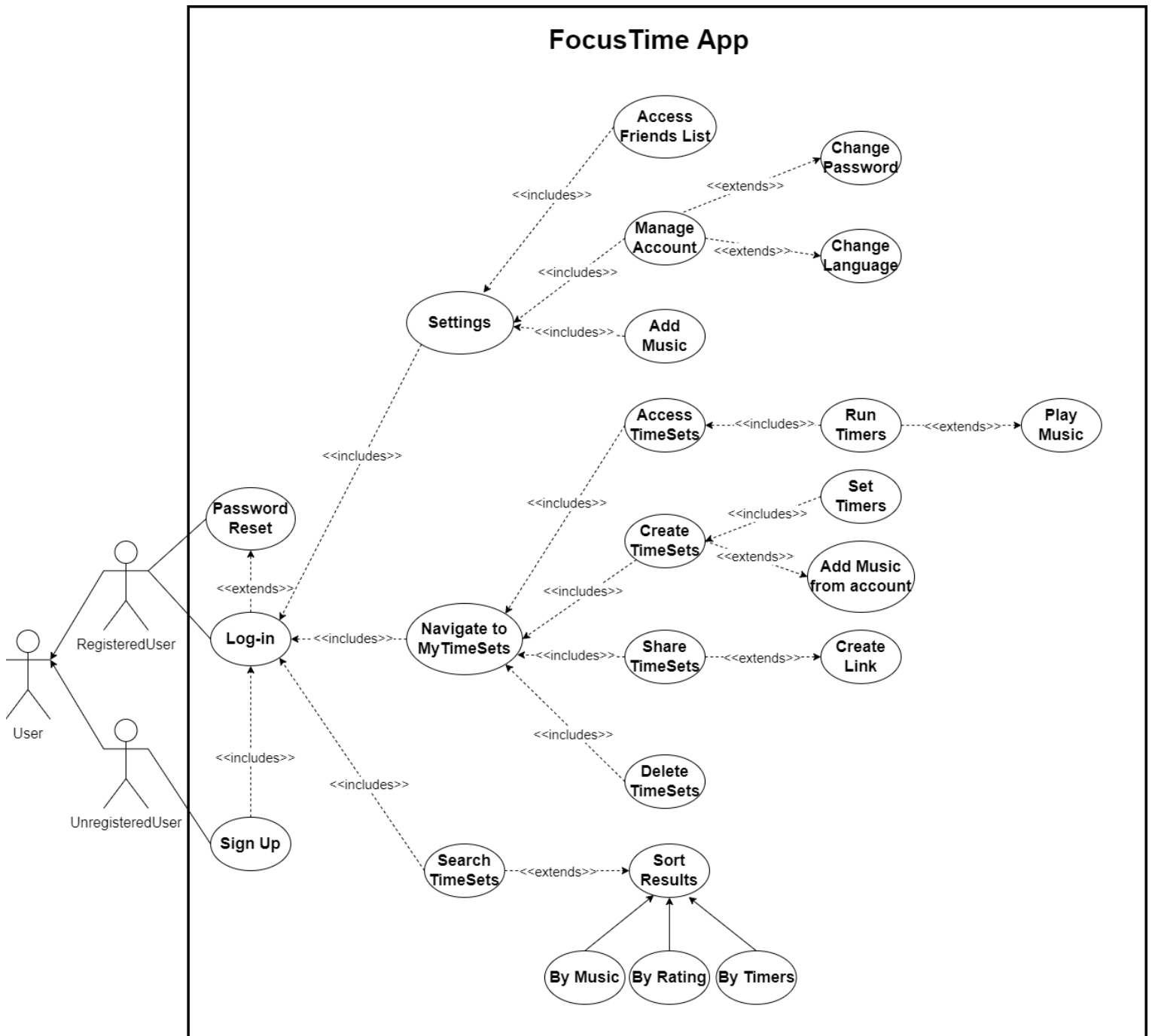
Title	Expected time
Description	This app is expected to be built in a year. However the design of the application must be finished by the end of the semester (May 2022)
Priority	0

2.8.2 Budget Constraints

Title	Expected Budget
Description	There are no funds available for this project, therefore there is no budget
Priority	5

3. Requirements Modeling

3.1.1 Use Case Diagram



4. Evolutionary Requirements

4.1 Functional Requirements

4.1.1 Web Application Version

Title	Web Application
Description	This mobile application will be applied to a website form for non-mobile users to access all their TimeSets
Priority	5
Applicable FR(s)	None

4.2 Non-Functional Requirements

4.2.1 Web App Speed

Title	Web App Speed
Description	The website form will be at least as fast as the mobile application with navigation, upload, searching, etc...
Priority	5
Applicable FR(s)	None