



CSC 431

Acacia App

Software Requirements Specification (SRS)

<Team number>

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Version History

Version	Date	Author(s)	Change Comments
1.0	2/04	Christopher Duarte	initial functional requirements
2.0	2/18	Ava Grossman	updated functional requirements
3.0	2/22	Team	input use case diagrams

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51. System Requirements

51.1 Functional Requirements

< List all functional requirements in the following example format >

1.1.1 Requirement Title

ID	FR1
Title	Account Setup
Description	Once a user creates a new account, this information must be relayed to the backend data warehouse so the user can login to their specific account at later dates.
Source Scenario	<Code for associated scenario in SCD>
Priority	0
Precondition(s)	Users are required to enter email, password, name, DOB etc. to enable account creation with unique username.
Basic Flow	When the user opens the application, the system prompts to either create an account or login. If the user does not have an account, the system prompts the user to create an account with a form to fill in necessary account information. If the user has an account, the system proceeds to login page and prompts the user for email and password. When the user logs in, the system validates credentials and lands on the user's profile.
Postconditions(s)	User information is recorded within the database.
Use Case Diagram	Acacia App Use Case Diagram

ID	FR2
Title	User Authentication Service
Description	The Acacia system must verify whether user provided login data is valid (allowing access to system) or invalid (system lock out).
Source Scenario	<Code for associated scenario in SCD>
Priority	0
Precondition(s)	User must have a valid account to have proper system access.
Basic Flow	When the user goes to the account Login Page, the system prompts the user for login data. When the user inputs login information, the system authenticates the user's input. When the user inputs valid information, the system grants access to the platform and land's the user on the home page. When the user inputs invalid data, the system is prompted to lock the user out of the system.
Postconditions(s)	The user will be locked out nor given access to the Acacia App/System.
Use Case Diagram	Acacia App Use Case Diagram

ID	FR3
Title	Account Editing/Deletion

Description	Ability of the user to delete account or edit associated username and password. If the account is to be deleted, associated user information will be removed from the database.
Source Scenario	<Code for associated scenario in SCD>
Priority	1
Precondition(s)	The user has to have an account established and be within the application system itself.
Basic Flow	When the user navigates to profile settings, the system allows the user to edit or delete their account. When the user edits username and or password, the system is prompted to update the database and send notification email to associated email. When the user chooses to delete the account, the system asks for confirmation to delete and removes the associated user account from the database.
Postconditions(s)	The user's account would be edited/deleted in tandem with the interface and database.
Use Case Diagram	Acacia App Use Case Diagram

ID	FR4
Title	Page Creation
Description	When a page is created, the system is prompted to ask the user for page utility. The user will be asked if they are recording numeric or categorical data. Based on response, various preset visualization formats can be used, which are up to the user to choose.
Source Scenario	<Code for associated scenario in SCD>
Priority	0
Precondition(s)	The user must have created an account, attempting to create a new page, and have less than 10 existing pages.
Basic Flow	When the user logs in and chooses to create a new page, the system asks for numerical or categorical data to be recorded. When the user chooses, the system asks for the questions to be asked daily for the page to be created. When the user enters the question, the system asks the user to pick from different visualization tools based on the type of data such as pixel chart, jar, FILL IN REMAINDER
Postconditions(s)	A new page is created with associated questions and the corresponding visual tool.
Use Case Diagram	Acacia App Use Case Diagram

ID	FR5
Title	Limit page creation to 10 pages
Description	Users may create up to 10 individual pages used to track personal needs, which is recorded in DB.
Source Scenario	<Code for associated scenario in SCD>
Priority	4
Precondition(s)	Number of pages associated with the user is validated by the system
Basic Flow	When the user logs in and navigates to their profile to create a new page, the system verifies that less than 10 pages are active within the user's account. If the user has less than 10 pages, the system allows the user to create a new page and follows basic flow from FR4. When the user has 10 active pages,

	the system denies the user's request to add a new page and displays a message to delete existing page to create a new one due to page limitation.
Postconditions(s)	User is limited to 10 active pages.
Use Case Diagram	Acacia App Use Case Diagram

ID	FR6
Title	Page Deletion
Description	Users can delete pages at their own will which cause deletion from the database. The user can not delete if there are not any active pages.
Source Scenario	<Code for associated scenario in SCD>
Priority	1
Precondition(s)	User must have at least one existing page.
Basic Flow	When the user logs in and navigates to their profile with existing page(s) from the home page , the user has the option to delete existing pages. When the user clicks to delete a page, the system responds with a confirmation notification. When the user confirms to delete, the system removes page from the user's profile and associated data in the database.
Postconditions(s)	Page is deleted from the user's profile and data is deleted from the database.
Use Case Diagram	Acacia App Use Case Diagram

ID	FR7
Title	Editing information within page
Description	If the user does not update their page daily for whatever the reason may be , the user has the ability to edit and/or add information within a page for the current day or previous days which must be relayed to the data warehouse. The user can not enter information for future dates. This requirement is to ensure users can keep their pages updated even if they do not log in every day.
Source Scenario	<Code for associated scenario in SCD>
Priority	1
Precondition(s)	User must have an account with at least one existing page
Basic Flow	When the user logs in and navigates to their profile from the home page, the user can choose to filter to a certain date (current or previous). The system will respond by asking questions based on the date input. When the user inputs data, the data warehouse will update with corresponding information.
Postconditions(s)	The page is updated within the user's profile and data is updated within the data warehouse.
Use Case Diagram	Acacia App Use Case Diagram

ID	FR8
Title	Accessing previous days information
Description	The user can access previous information based on certain dates they chose to access.
Source Scenario	<Code for associated scenario in SCD>
Priority	4
Precondition(s)	User must have an account with at least one existing page

Basic Flow	When the user logs in and navigates to his/her profile from the home page, the user can filter to a certain time frame. When the user does so, the data warehouse retrieves data from specified time period and outputs data per the layout of the page.
Postconditions(s)	The user can see their information for requested time period in the format chosen for that specific page
Use Case Diagram	Acacia App Use Case Diagram

ID	FR9
Title	Data Visualization of each page
Description	There is a dashboard to present data collected weekly, monthly, or yearly divided by page. The period of time can be customized per the user's request, but the default will be the data for the current week. Can be filtered by date, or page category(i.e. all hydration pages or finance pages)
Source Scenario	<Code for associated scenario in SCD>
Priority	0
Precondition(s)	The user must have an account and at least one existing page.
Basic Flow	When the actor logs in and navigates to his/her profile from the home page, the system will display the week's data for each page as a default.
Postconditions(s)	Data for the week is displayed per page based on the tool chosen when the page was created.
Use Case Diagram	Acacia App Use Case Diagram

ID	FR10
Title	Notification System
Description	A customizable system that allows the user to make notifications, such as daily reminders to update each of their pages.
Source Scenario	<Code for associated scenario in SCD>
Priority	3
Precondition(s)	The user must have an account
Basic Flow	The system will display a notification to the user's phone to update their pages for the day at a predefined time. When the actor utilizes the notification, the system will navigate to the user's home screen.
Postconditions(s)	A notification is sent to the user's phone to input data for the day.
Use Case Diagram	Acacia App Use Case Diagram

ID	FR11
Title	Page Viewing Frame
Description	The main frame of the application that displays the all previously created pages and allows access to options.
Source Scenario	<Code for associated scenario in SCD>
Priority	0
Precondition(s)	The user must have an account and be logged in. Only accessible after the first page creation is finished.

Basic Flow	After the user logins in and has created the first page, all subsequent application launches will land at this main frame. This frame allows viewing all user created pages and also allows access to page creation and options.
Postconditions(s)	Page is presented to the user.
Use Case Diagram	Acacia App Use Case Diagram

51.2 Non-Functional Requirements

< List all non-functional requirements in the following example format >

1.2.1 Requirement Title

ID	NFR1
Title	Account Database Automatic Verification with Timestamp
Description	Database should add new user information within minutes to make logging in and out seamless for future dates.
Source Scenario	<Code for associated scenario in SCD>
Priority	1
Applicable FR(s)	FR1-FR10

ID	NFR2
Title	Page Database Automatic update
Description	When the user attempts to filter to previous dates of their pages, the database should retrieve and provide data within seconds.
Source Scenario	<Code for associated scenario in SCD>
Priority	0
Applicable FR(s)	FR4, FR6, FR7, FR9

ID	NFR3
Title	Verification email when account is created
Description	When the user creates a new account, the user will be sent a link to the associated email address to verify the email address and account creation.
Source Scenario	<Code for associated scenario in SCD>
Priority	4
Applicable FR(s)	FR1, FR3

ID	NFR4
Title	Notification should be sent within a minute of the defined notification time.
Description	The user customizable notification must be sent within a minute of the time that the user defined the notification to be sent.
Source Scenario	<Code for associated scenario in SCD>
Priority	1
Applicable FR(s)	FR10

ID	NFR5
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Title	Database calls for time filters should accept week, month, and year as filter arguments
Description	Any call that the user makes that requires data to be filtered by time should be capable of being filtered by week, month, or year.
Source Scenario	<Code for associated scenario in SCD>
Priority	1
Applicable FR(s)	FR7, FR8, FR9

ID	NFR6
Title	Failed page access should call for a data resend within 5 seconds of the failure.
Description	If the user accesses the page and there was a failure (internet interrupt, app closed, hardware malfunction) the data for the page should be resent to the client within 5 seconds in order to reduce the amount of down time on the client side.
Source Scenario	<Code for associated scenario in SCD>
Priority	2
Applicable FR(s)	FR4, FR8, FR9

ID	NFR7
Title	Data/Page Retrieval and Presentation will be within 30 seconds.
Description	Upon the request of the user, data or page must be presented within 30 seconds of user request. Otherwise, there must be a timeout notification to notify the user that the requested process is invalid or takes too long.
Source Scenario	<Code for associated scenario in SCD>
Priority	2
Applicable FR(s)	FR9, FR10

ID	NFR8
Title	User Walkthrough Session of Acacia App may be completed within 5-10 mins.
Description	The Introductory Walkthrough of Acacia should be short and concise such that it can be completed within 5-10 mins from start. In this manner, the user will be able to obtain the skill of utilizing the application without consuming too much time. In turn, this enhances user experience.
Source Scenario	<Code for associated scenario in SCD>
Priority	3
Applicable FR(s)	FR1 - FR10

ID	NFR9
Title	User Authentication Process should take less than 2 mins.
Description	The User Authentication Process should take a minimal amount of time. Under normal usage, less than 2 mins. This will include username, password, and additional authentication checks.
Source Scenario	<Code for associated scenario in SCD>
Priority	2
Applicable FR(s)	FR2

52. System Constraints

52.1 Tool Constraints

< List all tool constraints in the following example format >

2.1.1 Requirement Title

ID	TC1
Title	Flutter
Description	Framework for app development
Priority	0

ID	TC2
Title	Adobe Creative Cloud
Description	From the Adobe Creative Cloud, we will use Adobe XD and Photoshop for front end development
Priority	0

ID	TC3
Title	Firebase
Description	Project management and app deployment
Priority	3

52.2 Language Constraints

< List all language constraints in the following example format >

2.2.1 Requirement Title

ID	LC1
Title	Dart
Description	A language designed by Google, optimized for UI development on mobile platforms.
Priority	0

52.3 Platform Constraints

< List all platform constraints in the following example format >

2.3.1 Requirement Title

ID	PC1
Title	iOS
Description	Mobile Operating System used on Apple Devices.
Priority	4

ID	PC2
Title	Android
Description	Mobile Operating System used on several company devices. Examples include Google, Samsung, and LG.
Priority	4

52.4 Hardware Constraints

< List all hardware constraints in the following example format >

2.4.1 Requirement Title

ID	HDC1
Title	Laptop
Description	To create application
Priority	0

ID	HDC2
Title	Smart Phone
Description	To test application
Priority	2

52.5 Network Constraints

< List all network constraints in the following example format >

2.5.1 Requirement Title

ID	NC1
Title	Internet Requirement

Description	An internet connection is required for the app to work, but does not need to be persistent. User profile and log information will be stored in the cloud. If no network is available, the app will store data locally.
Priority	1

52.6 Deployment Constraint

< List all deployment constraints in the following example format >

2.6.1 Requirement Title

ID	DC1
Title	Apple App Store
Description	After development, application will be released onto the Apple App Store.
Priority	5

ID	DC2
Title	Google Play Store
Description	After development, application will be released onto the Google Play Store.
Priority	5

52.7 Transition & Support Constraints

< List all transition & support constraints in the following example format >

2.7.1 Requirement Title

ID	TSC1
Title	App Maintenance
Description	Application will be maintained and provided the proper maintenance as to provide proper functionality.
Priority	5

52.8 Budget & Schedule Constraints

< List all budget & schedule constraints in the following example format >

2.8.1 Requirement Title

ID	BSC1
Title	Spring Semester

Description	Must be able to complete the project in its entirety by late April.
Priority	0

ID	BSC2
Title	No Budget/Money
Description	Must be able to complete the project without any monetary contribution.
Priority	0

52.9 Miscellaneous Constraints

< List all miscellaneous constraints in the following example format >

2.9.1 Requirement Title

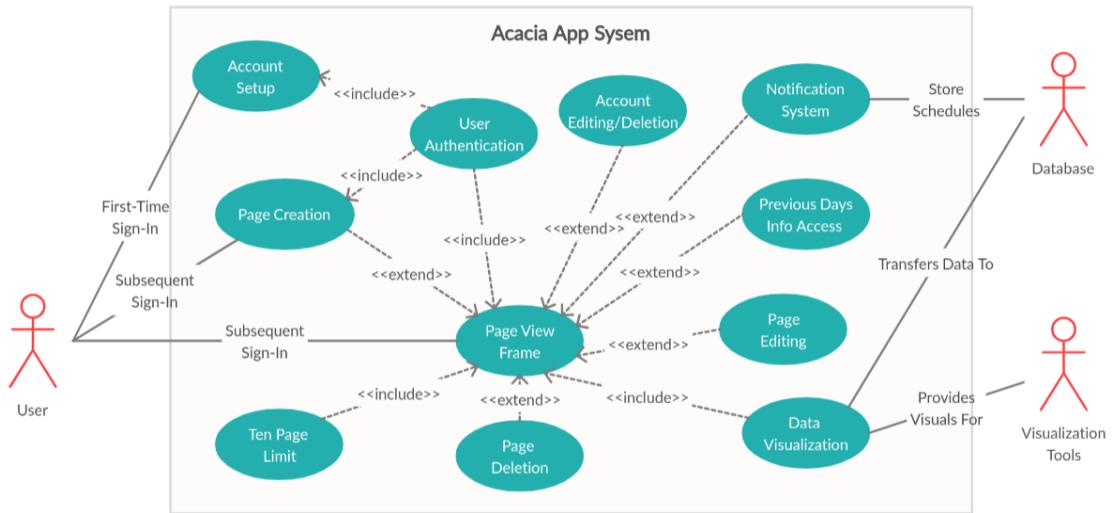
ID	<a unique ID for the constraint, e.g., C1>
Title	<Insert title>
Description	<A one or two sentence description>
Priority	<Priority from 0 (highest) – 5 (lowest)>

Requirements Modeling

< List all Use-case diagrams for the functional requirements in the following format >

1.1.2 Requirement Title

Acacia App Use Case Diagram:



Evolutionary Requirements

Functional Requirements

< List all functional requirements in the following example format >

1.1.3 Requirement Title

Title	<Insert title>
Description	<A one or two sentence description>
Priority	<Priority from 0 (highest) – 5 (lowest)>
Precondition(s)	<What needs to happen before>
Postconditions(s)	<What happens as a result>
Use Case Diagram	<Link or number, if present>

Non-Functional Requirements

< List all non-functional requirements in the following example format >

1.1.4 Requirement Title

Title	<Insert title>
Description	<A one or two sentence description>
Priority	<Priority from 0 (highest) – 5 (lowest)>
Applicable FR(s)	<Which functional requirement(s) is this applicable to?>