CEBU INSTITUTE OF TECHNOLOGY UNIVERSITY

COLLEGE OF COMPUTER STUDIES

Software Requirements Specifications
for
"Mémoire"
(Time Capsule System)

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Change History

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1. Introduction

1.1. Purpose

- *Describe the purpose of the SRS;*
- *Specify the intended audience for the SRS.*

1.2. Scope

- *Identify the software product(s) to be produced by name (e.g., Host DBMS, Report Generator, etc.);*
- *Explain what the software product(s) will, and, if necessary, will not do;*
- *Describe the application of the software being specified, including relevant benefits, objectives, and goals;*
- *Be consistent with similar statements in higher-level specifications (e.g., the system requirements specification), if they exist.*

1.3. Definitions, Acronyms and Abbreviations

- *provide the definitions of all terms, acronyms, and abbreviations required to properly interpret the SRS*

1.4. References

- *Provide a complete list of all documents referenced elsewhere in the SRS;*
- *Identify each document by title, report number (if applicable), date, and publishing organization;*
- *Specify the sources from which the references can be obtained.*

2. Overall Description

Mémoire is an online platform where users can create and store digital time capsules filled with memories, messages, or multimedia content. These capsules are set to be unlocked on a future date, allowing users to preserve significant moments. The platform supports both web and mobile access, enabling users to interact with, share, and contribute to capsules. With features like media uploads, offline editing, and notifications, Mémoire offers a unique way to capture and revisit memories at the right time.

2.1.   Product perspective

- *Put software product into perspective with other related products. If the product is independent and totally self-contained, it should be so stated here. If the SRS defines a product that is a component of a larger system, as frequently occurs, then this subsection should relate the requirements of that larger system to functionality of the software and should identify interfaces between that system and the software.*
- *A block diagram showing the major components of the larger system, interconnections, and external inter- faces can be helpful.*
- *Describe the modular decomposition of the components using the format below:*
    - *Module 1*
        - *Transaction 1.1*
        - *Transaction 1.2*
    - *Module 2*
        - *Transaction 2.1*
        - *Transaction 2.2*
    - *. . .*

2.2.   User characteristics

- *Describe all user types and their roles and privileges in the system*

2.4.   Constraints

- *Provide a general description of any other items that will limit the developer's options.*
- *Regulatory policies;*
- *Hardware limitations (e.g., signal timing requirements);*
- *Interfaces to other applications;*
- *Parallel operation;*
- *Audit functions;*
- *Control functions;*
- *Reliability requirements;*
- *Criticality of the application;*

- *Safety and security considerations.*

2.5.   Assumptions and dependencies

This subsection of the SRS should list each of the factors that affect the requirements stated in the SRS. These factors are not design constraints on the software but are, rather, any changes to them that can affect the requirements in the SRS. For example, an assumption may be that a specific operating system will be available on the hardware designated for the software product. If, in fact, the operating system is not available, the SRS would then have to change accordingly.

3. Specific Requirements

3.1. External interface requirements

3.1.1. Hardware interfaces

This should specify the logical characteristics of each interface between the software product and the hardware components of the system. This includes configuration characteristics (number of ports, instruction sets, etc.). It also covers such matters as what devices are to be supported, how they are to be supported, and protocols. For example, terminal support may specify full-screen support as opposed to line-by-line support.

3.1.2. Software interfaces

This should specify the use of other required software products (e.g., a data management system, an operating system, or a mathematical package), and interfaces with other application systems (e.g., the linkage between an accounts receivable system and a general ledger system).

3.1.3. Communications interfaces

This should specify the various interfaces to communications such as local network protocols, etc.

3.2. Functional requirements

[1] Web Application

1.1 Account Management

- Register a new user with a username, email, and password.
- Log in using credentials and receive an authentication token or session.
- Registered Users can add other users as friends i.e. memory buddies
- Update user profile details or reset the password.
- Deactivate or permanently delete a user account.
- Uses Google Authentication API

1.2 Time Capsule

- Users can create a new time capsule with a title, description, and set an opening date and time for the time capsule to open.
- Creator can Invite users to edit or View the Time Capsule
- Users with Edit privileges are able to upload photos ,videos ,etc to the capsule content.
- Only the creator and owner is able delete the capsule itself
- Creator can schedule the on lock the capsule and when locked, owner, collaborators, users, can't edit, view, delete the content capsule.

- When Capsule date is set on the same day and capsule is still not locked , It will not be locked unless set to another future date
- Visibility Can be set by the Creator to Public , Friends Only or private

1.3 Comment System

- Users can post comments to an opened time capsule they have viewing access to.
- Users can delete and edit comments
- Users can also view the comments of other users and reply
- Users can upvote and downvote a comment

1.4 View Archived Capsules

- Capsules are archived a time capsule after 7 days
- Users can also manually archive an opened capsule
- View archived time capsules.
- Revive or unarchive an old time capsule.
- Permanently delete archived capsules.

1.5 Content Moderation & Reporting System

- Admins can view all capsules and user activity.
- Admins can manage reported content (flagged by users).
- Admins can delete inappropriate or offensive content.

1.6 Simple Capsule Analytics

- Provide basic analytics for time capsule creators, showing metrics like:
  - Number of views.
  - Number of comments.
  - Number of times shared.
- This gives users insight into how engaging their time capsules are.

[2] Mobile Application

2.1 User Authentication (Login)

- Register a new user with a username, email, and password.
- Log in using credentials and receive an authentication token or session.
- Registered Users can add other users as friends i.e. memory buddies
- Update user profile details or reset the password.
- Deactivate or permanently delete a user account.
- Uses Google Authentication API

2.2 Time Capsule

- Users can create a new time capsule with a title, description, and set an opening date and time for the time capsule to open.
- Creator can Invite users to edit or View the Time Capsule
- Users with Edit privileges are able to upload photos ,videos ,etc to the capsule content.
- Only the creator and owner is able delete the capsule itself
- Creator can schedule the on lock the capsule and when locked, owner, collaborators, users, can't edit, view, delete the content capsule.
- When Capsule date is set on the same day and capsule is still not locked , It will not be locked unless set to another future date
- Visibility Can be set by the Creator to Public , Friends Only or private

2.3 Real-Time Media Uploads

- Capture and upload photos, videos, or voice notes directly from the mobile app.
- Apply filters or annotations to media before uploading.

2.4 Capsule Countdown Timer

- Implement a countdown timer for each time capsule that shows the time remaining until the capsule will open.
- Display the timer on both the capsule detail page and on the user's dashboard to build anticipation.

2.5 Offline Drafts & Syncing

- Create or edit capsules offline.
- Their work will be synced online after they gain internet access

2.6 Capsule Opening & Scheduled Releases

- Automate opening of capsules based on the set date.
- Notify all users who have viewing and editing access when a capsule is accessible.
- View opened capsules and interact with content.
- Uses Notification API (Firebase cloud messaging)

3.4   Non-functional requirements

Performance

Details

Security

Details

Reliability

Details