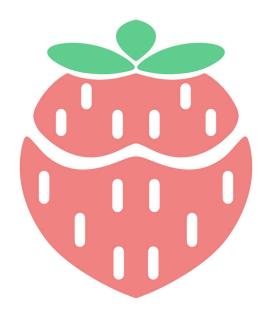


Interação Pessoa-Máquina

2025/2026

Capsumi

Stage 2: User and task analysis



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1. Problem Description

In the digital age, people generate an enormous amount of content (photos, videos, voice notes, documents, and social media posts). Thus, the vast majority of personal data remains adrift among devices and platforms, breaking apart connections, significance, and securing of moments or **memories**. Applications based on sharing and immediacy have no **long-term** reflection or emotional value or significance.

Capsumi allows users to create digital time capsules (customized collections of digital memories that remain locked until a designated future date). Each capsule is a container for fleeting emotions, experiences, and artifacts that stimulate reflective thinking and anticipation until opened. In contrast to photo albums, galleries, or cloud folders, Capsumi unique design incorporates temporal and emotional aspects so that users are designing a capsule based upon a life event, designating a theme that represents the emotional state, and determining when to review.

The interface and design of Capsumi is a fundamental emotion-centered approach to interaction design based on nostalgia, anticipation, and storytelling. By way of emphasis on personalization, multimedia content, and social, collaborative use, Capsumi provides a meaningful experience—to transform what has become a functional necessity of digital storage.

2. User Analysis

Primary User Group — Young People & Young Adults & Adults (14–30 years old)

These users are active creators of digital content. They document their daily lives, travels, friendships, and achievements through media. Capsumi appeals to their desire for creative expression and personal meaning.

Motivations: self-reflection, creativity, nostalgia, social connection.

Technical skills: high — familiar with mobile apps, cloud storage, and media organization.

Secondary User Group — Families and Close Friends & Digital Memory Enthusiasts (14–45 years old)

These users create capsules to preserve shared moments such as weddings, family vacations, or the growth of their children. Collaborative capsules allow family members to contribute content collectively.

Motivations: memory sharing, emotional bonding, sentimental preservation.

Technical skills: moderate — comfortable with everyday apps, prefer simplicity.

3. Task Analysis

Task 1: Create a New Capsule

- **Goal**: Allow users to build a new time capsule by selecting content and defining how/when it will be opened.
- Preconditions: User is logged in; has access to personal media (camera roll, cloud, or uploads).
- Detailed Subtasks:
 - **1.** Tap "+ Create Capsule" on the dashboard.
 - **2.** Choose a capsule name and short description.
 - **3.** Add media (drag-and-drop or select from phone gallery).
 - **4.** Write notes or attach audio memories (voice messages).
 - **5.** Select a theme (color palette, animation style, soundtrack).
 - **6.** Set unlock date (specific day, yearly, or event-based).
 - 7. Choose visibility: private, shared with specific users, or public.
 - 8. Preview capsule before saving.
- Exceptions: Missing media, empty title, or invalid date.
- Frequency: Occasional mainly during or after meaningful events.

Task 2: Open an Unlocked Capsule

- Goal: Access a capsule once its unlock date has arrived.
- Preconditions: Unlock date reached.
- Subtasks:
 - 1. Receive notification (push or email).
 - **2.** Tap to open capsule.
 - **3.** View a short unlocking animation (like a digital "seal breaking").

- **4.** Explore contents in chronological or thematic layout.
- 5. React with emojis, write reflection notes, or share impressions.
- Exceptions: Network issues, missing files, or damaged media.
- Frequency: Maybe low.

Task 3: Share or Collaborate on a Capsule

- Goal: Enable users to create shared capsules or send existing ones to friends.
- **Preconditions**: Capsule must be saved and visible to the user.
- Subtasks:
 - **1.** Select capsule \rightarrow tap "Share".
 - 2. Choose between "Collaborative" (others can add content) or "View-only".
 - 3. Invite others via email, link, or username.
 - **4.** Manage permissions (remove or restrict access).
- **Exceptions**: Invitation errors, access revoked mid-editing.
- Frequency: Occasional, during group events.

Task 4: Explore and Manage Active Capsules

- Goal: Let users view capsules that are currently locked or under construction.
- **Preconditions:** User has created at least one capsule.
- Subtasks:
 - 1. Open "Dashboard."
 - 2. Scroll through active capsules (cards showing countdown timers).
 - 3. Edit details (title, media, or theme).
 - 4. Pause, duplicate, or delete capsules.
- Exceptions: Syncing errors or expired capsules not refreshing automatically.
- Frequency: Daily, Monthly or Occasionally depending on capsule mode.

4. Scenario Design

The Family Anniversary Capsule (Shared Collaboration)

Daniel and his sister Julia are going to surprise their parents on their 25th anniversary. They create a shared capsule and invite family members to upload old family photos, short videos, and audio messages of well wishes and supportive messages.

The app shows the uploads from each person on a shared timeline. The capsule is scheduled to unlock on the anniversary day; and on that day the family comes together to watch the capsule come alive, as a group shared emotional experience.

Ana's "Year in Review" Capsule (Routine Memory Preservation)

Ana, a thirty-year-old creator, makes a new capsule every year in December to contemplate the bygone year. She uploads the best parts of her work, travels, and social life. She chooses a simple theme style for the background and the list of songs that most marked her year (happy songs, sad songs, etc).

On the first day of the New Year, she unseals the capsule of the last year to meditate on her development and emotional trip. Gradually, her timeline transforms into a digital storage of her advancement.

Alexandre's Graduation Capsule (Milestone Celebration)

Alexandre is a 24-year-old engineering student who is graduating. He chooses to build a capsule named "My University Journey."

He posts photos of his first year, brief videos of team projects, and graduation selfies. He includes a brief note to himself about his post-graduation objectives and configures the unlock time five years in advance.

When Alexandre opens the capsule in 2030, the interface greets him with a "congratulations" animation. He hears his former self speak of dreams that he has proceeded to realize, evoking a combination of pride and nostalgia. Capsumi turns a digital archive into a moment of reflection and growth.

Miguel's "Baby's First Year" Capsule (Family Legacy)

Miguel and his wife have just given birth to their first child. They created a capsule named "Baby Pedro — Year One."

They include short videos, milestone pictures, and family audio messages each month.

They've set the capsule to be opened on Pedro's first birthday. They also decided to create a tradition of doing it every year. When Pedro opens the capsules in the future, he'll relive his first years of life from his parents' point of view — a really emotional family memory moment.

5. Interviews

The interviews approved interest in the concept among the public and highlighted several key insights that will inform the design and development of Capsumi.

Here are the key takeaways:

Interview 1: The Creative Student

- What she liked: She loves making the capsules look and feel unique with themes and music.
- Her idea: It would be cool if the app could send you little "teasers" or "hints" before the capsule unlocks to make the waiting more exciting. She also wondered if it could connect to other apps, like Spotify, to automatically save her favorite song from a specific time.

Interview 2: The Sentimental Parent

- What he liked: He loves that he can invite family members (like grandparents) to add their own photos and messages to a shared capsule.
- **His worry:** He's concerned that the app might not be around in 18 years when his child is supposed to open the capsule. This brings up a great point: people need a way to **save or download their capsules** so they have them forever, no matter what happens to the app.