

Alvaro Andres Romero Castro

Baruj Vladimir Ramirez Escalante

Brayan Alejandro Munoz Perez

Jenny Catherine Herrera Garzon

Juan David Ladino Triana

## **Workshop No. 1 — Requirements, User Stories, and Story Mapping**

### **1. Requirements Documentation**

#### **1.1 Functional Requirements**

The Habitus system will allow users to select and record the completion of personal, academic, or work-related habits, showing progress through visual indicators and symbolic rewards.

##### **1. User Registration & Sign-in**

- The system must allow users to create an account using an email address and password.
- The user must be able to sign in and sign out.
- Profile editing and other personal data changes are not available in this phase

##### **2. Selection of Predefined Habits**

- The system must offer a catalog of habits grouped by categories: wellness, health, academic, and work.
- The user can activate or deactivate the habits they want to follow.
- Each habit will have a suggested frequency (daily or weekly).

##### **3. Daily Habit Logging**

- The user must be able to mark each habit as “completed” or “not completed” for the day.
- The system must automatically store the date of the entry.

- Duplicate entries for the same day and habit are not allowed.

#### 4. Progress Dashboard

- The system must display a dashboard with the percentage of habits completed during the week.
- It must show the current streak and a symbolic overall progress level.

#### 5. Symbolic Achievements

- The system will automatically award achievements for simple goals, such as:
  - Completing a habit for 7 consecutive days.
  - Reaching a weekly consistency above 70%.

#### 6. Data Persistence

- All user, habit, and log information must be stored in a relational database (PostgreSQL).
- Data must remain available even after signing out.

#### 7. General UI

- The interface will present the main sections: sign-in, habit selection, progress dashboard, and achievements obtained.
- The design must be minimalist, clear, and oriented toward well-being.

### 1.2 Non-Functional Requirements

#### 1. Usability

- The system must allow recording a habit in at most two clicks.
- The interface must be clear and accessible for any type of user.

#### 2. Performance

- Basic operations (registering or querying habits) must execute in under 500 ms

#### 3. Compatibility

- The application must work on major web browsers (Chrome, Firefox, Edge).

#### 4. Security

- Passwords must be stored using a secure hashing algorithm
- Authentication will be performed using JWT

#### 5. Reliability

- Habit records must be preserved even if the user signs out or refreshes the page.

#### 6. Maintainability

- The application will be developed under a layered architecture (frontend, backend, database).
- The code must be modularized and documented to support future extensions.

#### 7. Scalability (Future)

- The system's structure must allow adding new habits, metrics, or categories without modifying the application core.

#### 8. Privacy

- No personal information will be shown publicly, nor will data be shared among users.
- Users will be able to delete their account if they wish.

## 2. User Stories

Below are the main user stories for the **Habitus** system, organized by a functional module.

Each story includes acceptance criteria in **Given / When / Then** format.

### Module: Registration & Sign-in

#### 2.1. Create a User Account

*As a new user, I want to register with my email and password so that I can access the application and save my progress.*

#### Acceptance Criteria:

- **Given** I am on the registration page,
- **When** I enter a valid email and a strong password and click “Create account”,
- **Then** the system stores my data and displays a confirmation message indicating successful registration

## 2.2. Sign in

*As a registered user, I want to sign in with my email and password so that I can access my habits and progress.*

### Acceptance Criteria:

- **Given** I already have an account,
- **When** I enter my correct credentials in the sign-in form,
- **Then** the system redirects me to my main dashboard.

## 2.3. Sign out

*As an authenticated user, I want to sign out so that no one else can access my information.*

### Acceptance Criteria:

- **Given** I am signed in,
- **When** I select the “Sign out” option,
- **Then** the system ends my session and returns me to the start screen.

## Module: Habit Management

### 2.4. Activate Predefined Habits

*As a user, I want to choose habits from a predefined list so that I can focus only on the ones I want to work on.*

### Acceptance Criteria:

- **Given** I am authenticated and viewing the habit catalog,
- **When** I select the habits I want to activate,
- **Then** the system saves them as my active habits and shows them on my daily panel.

## 2.5. Record Daily Completion

*As a user, I want to mark whether I completed each day's habits so that I can track my progress.*

### Acceptance Criteria:

- **Given** I have active habits,
- **When** I mark a habit as “completed” or “not completed”,
- **Then** the system records the date and updates my weekly progress.

## Module: Progress & Analytics

### 2.6. View My Weekly Progress

*As a user, I want to see my percentage of completed habits so that I know how consistent I have been during the week.*

### Acceptance Criteria:

- **Given** I have recorded habits for several days,
- **When** I access the progress dashboard,
- **Then** the system shows my weekly completion percentage and my current streak.

## Module: Symbolic Achievements

### 2.7. Unlock Achievements

*As a user, I want to receive badges or achievements when I reach goals so that I stay motivated to continue with my habits.*

### Acceptance Criteria:

- **Given** I have active habits,
- **When** I reach a specific goal (such as 7 consecutive days or 70% weekly completion),
- **Then** the system shows an achievement notification and adds it to my list of achievements.

## Module: Persistence & Reliability

### 2.8. Save My Data Securely

*As a user, I want my habit and progress information to be saved automatically so that I don't lose my progress.*

#### Acceptance Criteria:

- Given I am marking or viewing habits,
- When I perform an action (complete, fail, sign in),
- Then the system updates the database and preserves the records for future sessions.

## 3. User Story Mapping



