Universidad Nacional de Colombia

Workshop 1

Requerements, User Stories and Story Mapping

Software Engineering II
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2025-2

Project: StartHub

Requirements Documentation

Functional requirements

1. **User management**
   1.1. The system must allow new users to register.
   1.2. The system must allow registered users to log in.
   1.3. The user must be able to edit their profile, including:
      - Personal information.
      - Partner startups.
   1.4. The system must allow password recovery via email.

2. **Startups management**
   2.1. Users will be able to create, edit, view, and delete their own startups.
   2.2. Each startup must include the following information:
      - Startup name.
      - Project description.
      - Contact details (email, website, social media).
      - Categories.
   2.3. Any user can publicly view information about a startup.
   2.4. Users will be able to comment and vote (upvote/downvote) on startup posts.
   2.5. The system must allow positive and negative votes to be counted and displayed for each startup.
   2.6. Users with administrator permissions may delete startups that violate the site's rules.

3. **Social interaction**
   3.1. Registered users will be able to comment on startup posts.
   3.2. Comments may be edited or deleted by their author.
   3.3. Comments may be deleted by users with administrator permissions if they violate the site's rules.

4. **Navigation and search**
   4.1. The system must offer a search engine to locate startups by:
      - Name.
      - Category.
      - Keywords.
   4.2. The system must allow search results to be filtered and sorted according to criteria (by relevance, date, votes, etc.).
   4.3. The system should have thematic subforums that group startups according to their category or sector (technology, health, education, energy, etc.).

      4.4.   Users will be able to navigate between subforums and view the startups associated with each one.

Functional requirements

1. **Performance**
   1.1.   The system must allow a server response time of less than 5 seconds for main operations (search, startup display).

2. **Safety**
   2.1.   Passwords must be stored in encrypted form.
   2.2.   Requests to the backend must be made via HTTPS.
   2.3.   Only authenticated users may perform creation, editing, or deletion operations.
   2.4.   The system must validate inputs to prevent SQL injections and XSS attacks.

3. **Usability**
   3.1.   The interface should be intuitive and responsive, adapting to different devices.
   3.2.   Forms should include clear error messages for the user.

4. **Maintainability**
   4.1.   The code must be modularized and follow good development practices.
   4.2.   The API must be documented.
   4.3.   Basic unit tests should be included for the main backend functions.

5. **Scalability**
   5.1.   The database must be designed to support growth in the number of startups and users without significant loss of performance

User Stories

1. **User management**

1. User registration
User Story: - **As :** A New user. - **I need to:** Register on the platform by creating a personal account. - **So that I can :** Access the application functionalities.
Acceptance criteria: - **Given that :** The user is not registered on the platform and has to do it in order to use the application. - **When :** The user access the application and because the user doesn't have an account he enters directly in the registration form and then enters the required personal information. - **Then :** The application creates a new user account, sends a confirmation message for the registration and then allows the user to log in with his new credentials.

2. Log in
User Story: - **As :** A registered user of StartHub. - **I need to:** Log in to my account using my credentials. - **So that I can :** Access my profile, manage my startups, and interact with other users within the platform.
Acceptance criteria: - **Given that :** The user already has a registered account. - **When :** The user opens the application and then enters their valid email and password in the login form and submits the request. - **Then :** The system verify the credentials, grant access to the user`s account, and redirect them to the homepage.

3. Edit profile
User Story: - **As :** A user of StartHub. - **I need to:** Edit my profile information, including my personal details and associated startups. - **So that I can :** Keep my profile updated and ensure that other users can view accurate information about me and my startups.
Acceptance criteria: - **Given that :** The user is logged in and then enters their profile page. - **When :** The user updates their personal information or modifies the list of startups linked to their profile and saves the changes by clicking on the related button. - **Then :** The system update the user's profile data in the database and display a confirmation message indicating that the changes were successfully saved.

4. Password recovery
User Story: - **As :** A user of StartHub. - **I need to:** Recover access to my account through a secure password reset process. - **So that I can :** Regain access to my personal account.
Acceptance criteria: - **Given that :** The user has forgotten their password and cannot log in to the platform. - **When :** The user clicks on the "Forgot password" link in the log in process, enters their registered email address, and requests a password reset. - **Then :** The system send an email containing a secure link to reset the password, allowing the user to create a new one and regain access to their account.

2. Startups Management

5.   Create startup
User Story: - **As :** A user of StartHub. - **I need to:** Create a new startup profile. - **So that I can :** Show my startup to the community, attract potential partners, and receive feedback from other users.
Acceptance criteria: - **Given that :** The user enters the Startups Management page and wants to register a new startup. - **When :** The user accesses the "Create Startup" section and fills out the form with the required details (startup name, project description, contact information, categories, etc.). - **Then :** The system creates a new startup entry, stores the information in the database, and displays a confirmation message.

6.   Edit startup
User Story: - **As :** A user of StartHub and owner of a startup. - **I need to:** Edit the information of my existing startup. - **So that I can :** Keep my startup details updated and ensure that visitors see accurate and current information about my project.
Acceptance criteria: - **Given that :** The user enters the Startups Management page and has at least one startup created under their account. - **When :** The user accesses the "Edit Startup" option, modifies the startup's information (such as name, description, contact details, or categories), and saves the changes. - **Then :** The system update the corresponding startup data in the database and displays a confirmation message.

7.   Delete startup
User Story: - **As :** A user of StartHub and owner of a startup. - **I need to:** Delete one of my startups from the platform. - **So that I can :** Remove outdated or irrelevant projects and keep my startup portfolio organized.
Acceptance criteria: - **Given that :** The user enters the Startups Management page and has at least one startup created under their account.

- **When :** The user selects a specific startup, chooses the "Delete" option and confirms the deletion.
- **Then :** The system removes the startup from the database and displays a confirmation message of the change.

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8. View startups

User Story:
- **As :** A user of StartHub.
- **I need to:** View detailed information about a specific startup.
- **So that I can :** Learn more about the project, its purpose, and its contact details, and decide whether to interact with or support it.

Acceptance criteria:
- **Given that :** The user is browsing the Startups page and wants to see details of a particular startup.
- **When :** The user selects a startup from the list or search results.
- **Then :** The system display the startup full profile, including its name, description, contact information, category, and votes or comments.

3. Social Interaction

9. Vote on startups

User Story:
- **As :** A user of StartHub.
- **I need to:** Vote positively or negatively on a startup post.
- **So that I can :** Express my opinion about the quality or potential of a startup and help highlight the most valuable projects in the community.

Acceptance criteria:
- **Given that :** The user is browsing the Startups page and wants to vote for a specific startup.
- **When :** The user clicks the upvote or downvote button for that startup.
- **Then :** The system records the user's vote, update the total vote count displayed on the startup's page, and prevent multiple votes from the same user on the same startup.

10. Comment on startups

User Story:
- **As :** A user of StartHub.
- **I need to:** Post comments on startup profiles.
- **So that I can :** Share feedback, ask questions, or start discussions with other users and startup

owners.

Acceptance criteria:
- **Given that :** The user is browsing the Startups page and wants to comment on a specific startup.
- **When :** The user writes a comment in the comment section of a specific startup and submits it.
- **Then :** The system save the comment, display it under the corresponding startup, and show the author's name and timestamp.

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11. Moderate comments

User Story:
- **As :** An administrator of the StartHub platform.
- **I need to:** Delete comments that violate the site's rules or contain inappropriate content.
- **So that I can :** Maintain a respectful and professional environment within the StartHub community.

Acceptance criteria:
- **Given that :** The administrator is reviewing comments posted by users on different startups.
- **When :** The administrator identifies a comment that violates community guidelines and selects the "Delete" option.
- **Then :** The system removes the comment from public view and displays a message to the author with the reasons why it got deleted.

4. Navigation and Search

12. Search for startups

User Story:
- **As :** A user of StartHub.
- **I need to:** Search for startups using specific criteria such as name, category, or keywords.
- **So that I can :** Quickly find startups that match my interests or potential collaboration areas.

Acceptance criteria:
- **Given that :** The user is browsing the Startups page and wants to explore or locate specific startups.
- **When :** The user enters search terms (name, category, or keywords) in the search bar and submits the query.
- **Then :** The system display a list of startups that match the search criteria, showing relevant details such as name, description, and votes.

13. Filter startups
User Story: **- As :** A user of StartHub. **- I need to:** Filter and sort the search results of startups based on different criteria such as relevance, date, or votes. **- So that I can :** Easily find the most relevant or high-quality startups according to my interests and preferences.
Acceptance criteria: **- Given that :** The user has performed a search and is viewing a list of startup results. **- When :** The user selects a filter (like category or date) or a sorting option (by most votes or most recent). **- Then :** The system update and display the list of startups according to the selected filters and sorting criteria.

14. Browse subforums
User Story: **- As :** A user of StartHub. **- I need to:** Navigate through thematic subforums that group startups by category or sector. **- So that I can :** Explore startups within specific areas of interest and related to particular industries.
Acceptance criteria: **- Given that :** The user is browsing the Startups page and wants to explore a particular subforum. **- When :** The user selects a subforum (such as "Technology" or "Health"). **- Then :** The system must display only all startups associated with that category, allowing the user to view their details, vote, or comment as permitted.

User Story Mapping

Link del ussr-story-mapping: User-Story-Mapping

User story mapping

Activities	User management	Starups management	Social interaction	Navigation and search	Technical requirements

Tasks

Password recovery	Log in	User registration	Manage profile	Create and manage startups	Edit startup information	Delete startups	Leave Comments on Startups	Vote for or against startups (upvote/downvote)	Manage comments in starups	Explorar y buscar startups	Filter results by relevance or votes

Browse subforums | Safety and performance

Sub-Tasks

User management				Starups management			Social interaction			Navigation and search			Technical requirements
Check if user exist	Validate information entered by user (empty fields)	Create database	Edit personal information	Allow the user who is posting to add key information	Add edit button	Add erase button	Interact with startups	See information about published startups	capacity to remove startups that violate the site's rules	Implement search parameter	Filter selection by votes	Filter by categories	Encrypt passwords and use HTTPS.
Email to modify password	Create front-end with required fields	Create connection to database	Edit associated startups	Allow the user to select a category	Validate that the startup is owned by the user	Confirmation pop-up	Can add comments in straups	See votes for startup	Posibility to administrator user delete comments	Explore and search for startups by name, category, or keywords.	filter database with startups by votes	filter database with startups by categories	Validate inputs to prevent attacks
Validate security code send to email	Compare and validate information with database	Validate information entered by user (email with @, password with minimum characters, empty fields)	Modify password	confirmation message	Allow the owner to modify all fields	Delete from database	Save comment in starup and database	Modify vote	Email informing of the deletion of the comment	Search the database for related startups	Display selected startups on the front end	Display selected startups on the front end	Optimize the system to handle good response times
Modify usser data in database		Email to validate user	View your own startups	Addition to the database	Startup confirmation message modified		Can edit or delete comments startups	Modify vote quantity in stratup	Modify database		Buttons for filtering by votes on the front end	Buttons for filtering by categories on the front end	
Create front-end with required fields		Create front-end with required fields			Database modification								

Priority: High ▮(red) Medium ▮(orange) Low ▮(green)