

Software Engineering II - Workshop 1

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1. Requirements

1.1 Functional Requirements

Requirement	Description
User Registration and Login	The system must allow users to register using email and password, and authenticate through a login form.
Profile Creation	The system must allow users to create and edit a personal contact card with name, profile picture, biography, and links (e.g., social media, portfolio).
Profile Customization	Users can customize their personal contact page's appearance (colors, layout, and link order).
View Public Profiles	Users can view the public profiles of other users through shared links.
Add Contacts	Users can save other users' profiles into their personal contact list.
Add Relationship Notes	Users can attach personal notes to saved contacts, describing where they met, impressions, or shared experiences.
Edit and Remove Contacts	Users can edit notes or remove contacts from their contact list.
Admin Dashboard	The system must provide an admin panel to view all users' profiles.
User Management (Admin)	The admin can block or delete user accounts if they violate platform rules.
Search Functionality	Users can search their saved contacts by name or tag.

1.2 Non-Functional Requirements

Requirement	Description
Usability	The interface should be intuitive and responsive for both desktop and mobile devices.
Performance	The system should respond to user actions (e.g., navigation, saving data) within 2 seconds.
Scalability	The backend must support future scaling to handle more users and requests.
Security	User passwords and personal data must be securely stored and transmitted using HTTPS and encryption.
Availability	The web application should be available 99% of the time during normal operating hours.
Maintainability	The codebase must be modular and follow best practices to allow future updates and feature additions.
Technology Stack	The system will be built using FastAPI (Python) for the backend, NextJS with React for the frontend, and MongoDB as the database.
Containerization	The project will use Docker to ensure environment consistency across deployments.
Accessibility	The application should meet basic accessibility guidelines (e.g., text contrast, keyboard navigation).

2. User Stories

WEA1	User Registration	High	6 Hours
User Story			
<p>As a new user</p> <p>I need to register on the platform</p> <p>So that I can access my personal page</p>			
Acceptance Criteria			
<p>Given that the user is on the registration page</p> <p>When they enter valid information and submit the form</p> <p>Then the account is created and the system redirects them to the dashboard</p>			

WEA2	User Login	High	4 Hours
User Story			
<p>As a registered user</p> <p>I need to log in to the system</p> <p>So that I can access my account and manage my information</p>			
Acceptance Criteria			
<p>Given that the user already has an account</p> <p>When they enter valid credentials</p> <p>Then the system grants access to the main dashboard</p>			

WEA3	Card Creation and Editing	High	8 hours
User Story			
As an authenticated user			
I need to create and edit my personal content card			
So that other users can view my public information			
Acceptance Criteria			
Given that the user is authenticated			
When they complete the profile fields and save changes			
Then the information is stored and shown on their public profile			

WEA4	Profile Customization	Medium	6 Hours
User Story			
As an authenticated user			
I need to customize the appearance of my profile			
So that I can reflect my personal or professional style			
Acceptance Criteria			
Given that the user is on the customization section			
When they change colors, layout, or link order			
Then the changes are saved and applied to their profile			

WEA5	View Public Profiles	Medium	4 hours
User Story			
As a user or visitor			
I need to view other users' public profiles			
So that I can see their shared information and links			
Acceptance Criteria			
Given that the user has a valid profile link			
When they open the link			
Then the system displays the corresponding public profile			

WEA6	Save Contacts	High	6 Hours
User Story			
As an authenticated user			
I need to save another user's profile			
So that I can access it easily later			
Acceptance Criteria			
Given that the user is viewing another user's public profile			
When they click "Save Contact"			
Then the system adds that profile to their personal contact list			

WEA7	Add Personal Notes to Contacts	High	6 hours
User Story			
As an authenticated user			
I need to add personal notes to saved contacts			
So that I can remember the context of our relationship or where we met			
Acceptance Criteria			
Given that the user has a saved contact			
When they write a note and save it			
Then the system attaches the note to that specific contact			

WEA8	Edit or Delete Contacts	Medium	6 Hours
User Story			
As an authenticated user			
I need to edit or delete saved contacts			
So that I can keep my contact list updated			
Acceptance Criteria			
Given that the user has saved contacts			
When they select a contact and choose "Edit" or "Delete"			
Then the system updates or removes the contact information accordingly			

WEA9	Search Contacts	Medium	4 hours
User Story			
As an authenticated user			
I need to search for contacts within my list			
So that I can find them quickly by name or keyword			
Acceptance Criteria			
Given that the user has several saved contacts			
When they type a name or keyword in the search bar			
Then the system displays only the matching contacts			

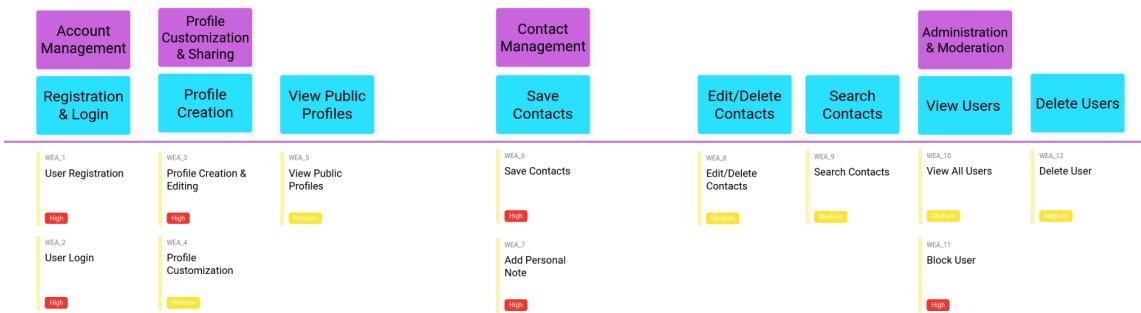
WEA10	View All Users	Medium	6 Hours
User Story			
As a system administrator			
I need to view all registered users			
So that I can monitor activity across the platform			
Acceptance Criteria			
Given that the administrator is logged in			
When they access the admin dashboard			
Then the system displays a list of users with basic information			

WEA11	Block Users	High	4 hours
User Story			
As a system administrator			
I need to block users who violate the rules			
So that the platform remains safe and moderated			
Acceptance Criteria			
Given that the administrator is in the control panel			
When they select a user and choose "Block"			
Then the system prevents that user from logging in			

WEA12	Delete Users	Medium	4 Hours
User Story			
As a system administrator			
I need to delete rule-breaking user accounts			
So that I can keep the user base from breaking terms of service			
Acceptance Criteria			
Given that the administrator is in the user management panel			
When they select a user and click "Delete"			
Then the system permanently removes all data associated with that user after confirmation			

User Story Mapping

User Story Mapping



References

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