

Product Requirements Document (PRD): User Auth Module

1. Introduction

The User Auth Module is a new addition to our product that aims to enhance the user experience and provide valuable functionality to our users. This module addresses the pain point of manual user authentication and password recovery, offering a seamless and secure solution. By integrating this module into our existing product, we will improve workflow efficiency and deliver a cohesive user experience. This PRD outlines the requirements, features, user stories, timeline, testing, documentation, and feedback process for the User Auth Module.

2. Target Users

The User Auth Module caters to our user base, specifically focusing on the following segment:

- Users who want to create an account with email and password manually.
- Users who value security and require email verification for account creation.
- Users who need a straightforward login process with email and password.
- Users who may forget their passwords and need a password recovery feature.

3. Features and Functionalities

The User Auth Module will include the following features and functionalities:

1. User Account Creation:

- Users can create an account by providing their email and password.
- Validation checks will ensure the email is in the correct format and the password meets security requirements.
- Upon successful account creation, users will receive a verification email containing a verification link.

2. Email Verification:

- The verification link in the email will validate the user's email address and mark it as verified.
- Users will be redirected to a confirmation page upon clicking the verification link.
- Unverified users will not be able to access certain platform features until they verify their email.

3. User Login:

- Users can log into the platform using their verified email and password.
- Authentication will verify the email and password combination for successful login.
- Upon successful login, users will be redirected to their dashboard or the last accessed page.

4. Forgot Password:

- Users who forget their passwords can initiate the password recovery process.
- The "Forgot Password" feature will prompt users to enter their email address.
- An email with a password reset link will be sent to the provided email address.
- Clicking the password reset link will allow users to set a new password for their account.

4. User Stories

1. As a new user, I want to create an account with my email and password so that I can access the platform.
2. As a new user, I want to receive a verification email to confirm my email address and activate my account.
3. As a user, I want to log into the platform using my email and password securely.
4. As a user, I want the option to recover my password if I forget it.
5. As a user, I want to receive a password reset email with a link to set a new password.

5. Scope

The User Auth Module will cover the creation of user accounts, email verification, user login, and password recovery. It will not handle additional user management functionalities such as user roles, profile management, or account deletion.

6. Technical and Resource Limitations

- The User Auth Module will rely on existing backend infrastructure and databases to store user information securely.
- Email delivery and verification will require integration with an email service provider.
- The module will adhere to the available resources and timeframe allocated for development.
- Compatibility with the existing product's technology stack and architecture will be ensured.

7. Performance and Scalability

- The module should be able to handle the expected user base without compromising performance.
- Response times for user authentication and password recovery should be within acceptable limits.
- Performance benchmarks and metrics should be defined to measure the module's efficiency and responsiveness.

8. User Interface (UI) and User Experience (UX)

- The User Auth Module should align with the existing visual and interaction design patterns of the product.
- Consistent UI components and branding elements should be utilized.
- Wireframes and mockups will be provided to the development team for reference.

9. Dependencies and Integrations

- The module will integrate with the existing backend infrastructure and databases for user management and authentication.
- Integration with an email service provider will be necessary for sending verification and password reset emails.
- The module will interact with the existing product's session management and authorization mechanisms.

10. Testing Requirements

- Functional testing: User account creation, email verification, user login, and password recovery flows should be thoroughly tested.
- Security testing: The module should be assessed for potential vulnerabilities, including input validation and protection against common attacks.
- Performance testing: Load testing should be conducted to ensure the module performs well under expected user loads.
- User acceptance testing (UAT): A group of representative users should validate the module's features and functionalities.

11. Development Timeline

- Milestone 1: Requirements gathering and analysis (2 weeks)
- Milestone 2: Development of the User Auth Module (4 weeks)
- Milestone 3: Testing and bug fixing (2 weeks)
- Milestone 4: User acceptance testing and feedback iteration (2 weeks)

12. Documentation

- User guides: Detailed instructions on account creation, email verification, login, and password recovery processes.
- API documentation: For integration with other modules or external systems.
- Technical specifications: Documentation detailing the module's architecture, design patterns, and database schema.

13. Feedback and Iteration

- Stakeholders will be encouraged to provide feedback and suggestions throughout the development process.
- Regular feedback cycles will be scheduled to ensure alignment with stakeholder expectations.
- Revisions to the PRD will be made as needed to incorporate feedback and improve the module.

By following this comprehensive PRD, we will ensure the successful development and implementation of the User Auth Module, delivering a seamless and secure user experience while addressing the pain points of our target user segment.