NDA App

Software Requirements Specification

Document: SRS

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1. Introduction

1.1 Purpose

The purpose of this document is to provide a detailed description of the requirements for the "NDA App" software. It explains what the system needs to do and how it should function. This document will be used by developers, testers, and project managers to understand what needs to be built and ensure the final product meets all the necessary requirements.

1.2 Scope

The "NDA App" is a mobile application that allows users to create, send, sign, and manage Non-Disclosure Agreements digitally. The app gets rid of the need for paper NDAs by letting users pick from templates, fill in the details, and send them to another party for signing. Users can track where their NDAs are in the process, whether they're waiting to be signed, have been rejected, or are completed. The app organizes documents into active and inactive lists so users can easily find what they need. Once an NDA is fully signed, users can download it as a PDF for their records. The application will be free to download from the Google Play Store and Apple App Store.

1.3 Definitions

NDA (Non-Disclosure Agreement): A legally binding contract that establishes confidential relationships between parties

Initiator: The user who creates and sends an NDA to another party

Receiver: The user who receives an NDA from an initiator for review and signature

Digital Signature: An electronic signature that authenticates the identity of the signer

Active Agreement: An NDA that has been signed by both initiator and receiver and is still legally binding

Pending Agreement: An NDA that has been signed by the initiator and is awaiting a signature from the receiver

Inactive Agreement: An NDA that was completed (signed by both parties) but the document is no longer legally binding as it has expired due to time

2.   Overall Description

2.1   Product Perspective

The NDA App is a cloud-based mobile application system that stores and manages the following information:

- **User Accounts**: The system stores user information, including name, email address, company name, and account credentials. This information is used for authentication, document creation, and identifying parties involved in NDAs.
- **NDA Documents**: The system maintains document details, including the party names and emails, company information, confidentiality terms, effective dates, and expiration periods. Each NDA has a unique identifier and tracks its current state (Created, Sent, Signed, Rejected, Expired_NoSign, or Fulfilled).
- **Digital Signatures**: The system records signature data, including who signed, when they signed (timestamp), and the digital signature itself. This information ensures the legal validity of agreements and provides a complete audit trail.
- **Document Status History**: The system logs all state changes and actions taken on each NDA, including when it was created, sent, edited, signed, or rejected. This history helps users track the progress of their agreements and resolve any disputes.

2.2   Product Function

The NDA App provides the following major functions:

1. User Account Management

- User registration and login

- Profile management (name, email, company information)

- Password recovery

2. NDA Creation

- Create new NDAs from customizable templates

- Fill in party information (names, emails, company names)

- Define confidentiality terms and conditions

- Preview NDAs before sending

3. NDA Distribution

- Send NDAs to receivers via email notification

- Track sent NDAs in the dashboard

- Receive notifications when NDAs are viewed or edited

4. NDA Review and Editing

- Receivers can view sent NDAs

- Receivers can edit NDA fields before signing

- Edited NDAs return to "Created" state and notify the initiator

5. Digital Signature

- Apply legally binding digital signatures to NDAs

- Support signatures from both initiator and receiver

- Timestamp all signatures

6. NDA Management

- View all active and completed NDAs in dashboard

- Filter and search NDAs by status, date, or party

- Download completed NDAs as PDF files

- Archive or delete old NDAs

7. Notifications

- Push notifications for NDA status changes

- Email notifications for critical actions

- In-app notification center

2.3   User Characteristics

The NDA App is designed for two primary user types:

1. **Initiator (Sender)**
   - Typical User: Business professionals, HR personnel, legal assistants
   - Technical Expertise: Moderate
   - comfortable with mobile applications and basic document creation
   - may create and send multiple NDAs per week
   - Goals: Quickly create and distribute NDAs, track signing progress, maintain records

2. **Receiver (Signer)**
   - Typical User: Contractors, consultants, potential business partners, job candidates
   - Technical Expertise: Basic to Moderate
   - must be able to navigate mobile apps and understand legal documents
   - Frequency of Use: Occasional
   - may only sign NDAs a few times per year
   - Goals: Review terms, make necessary edits, sign securely, keep records

Both user types are expected to:

- Have access to a smartphone or tablet
- Have basic reading comprehension skills for legal documents
- Understand the purpose and implications of NDAs
- Have an active email address
- Be at least 18 years of age (legal signing age)

3. Specific Requirements

3.1   User Interfaces

Screen Layout

- The App fills the user's mobile phone screen for both vertical and horizontal viewing

Navigation

- From the Home page, users have the option to Create NDA, View Created/Active NDAs, Logout, and View Received NDAs

Main Screens

- <u>Login Screen:</u> Prompts users to enter valid email address
- <u>Verification Screen:</u> Prompts users to enter correct verification code sent to valid email address
- <u>Dashboard:</u> Presents user with option to Create NDA, View Created/Active NDAs, Logout, and View Received NDAs
- <u>Create NDA:</u> Presents user with option of templates to create an NDA from, as well as gives user ability to edit any text
- <u>View Created/Active NDAs:</u> Allows user to view list of expired or active NDA documents that pertain to them
- <u>View Received NDAs:</u> Allows user to view NDAs that have been sent to them that have not been rejected or signed

3.2   Hardware Interfaces

Touchscreen

- Basic touchscreen features are implemented in the app (zoom, scroll, swipe)
- Touchscreen features should be smooth and synchronous

Storage

- Additional storage is needed to save documents to mobile devices from app

Internet Connection

- Needs Wi-Fi or cellular data to receive new documents

3.3   Software Interfaces

Software Used

- Android Developer Studio will be used to create the app for the Android market
- X Studios will be used to create the app for the Apple/IOS market

4. Functional Requirements

4.1   User Stories

Login:

- As the initiator or the receiver, I want to be able to login into the NDA app to create, edit, sign, or send an NDA document.

Details:

The user types in their email and password; the user then clicks the "Get code" button, and a code is sent to the user's email. Then the user types the code in and presses the "Login" button. The user is also able to return to login screen from the "Enter Verification Code" screen.

Acceptance Criteria:

- The user must type in a valid email and password
- The user must type in a valid verification code
- The user is able to return to login screen from the "Enter Verification Code" screen
- The user can log in into the app

Dashboard Navigation:

- As the initiator or receiver, I want to be able to navigate the dashboard so that I can access options to create NDAs, view NDAs, access my inbox, and be able to log out.

Details:

After logging in, the user is taken to the Dashboard. From here they can select "Create NDAs" or "View NDAs" buttons, they can access their inbox to sign NDAs sent to them, or they choose to log out. If the user has no NDAs or no NDAs sent to them, then the inbox and "View NDAs" popup will be empty.

Acceptance Criteria:

- When "Create NDA" button is clicked, it takes you to fill out the text file
- When "View NDAs" button is clicked, a popup letting you choose between Active and Active Documents appears
- When inbox is clicked, a popup of "Your Inbox" appears letting you choose your invitations from other users
- If user has no current NDAs, then View NDAs popup is empty
- If user has no current invites to sign NDAs, then inbox popup is empty

View Documents (Active & Inactive Lists):

- As the initiator or receiver, I want to be able to view all active or inactive documents that pertain to my account so that I can keep track of all documents pertaining to my account.

Details:

The user can select the View Document button from the Dashboard; the user will be prompted to select whether they want to view Active or Inactive documents. From this screen (where user chooses Active or Inactive) the user can select the "back" button and return to the Dashboard. When viewing a document, you can select the "Back" button which will return the user to the list of documents (whether Active or Inactive depending on what was originally selected upon clicking "View Document").

Acceptance Criteria:

- o The user is prompted to select whether they want to view Active or Inactive documents once initially selecting View Documents
- o Depending on whether the user selects Active or Inactive, only the Active Documents or Inactive Documents pertaining to that users account are shown
- o The user can click on any of the listed documents and examine the selected document
- o The user can select "back" on any document and it will return them to the list of Active or Inactive documents

Create NDA:

- As a user, I want to be able to create and sign a new NDA document so that I send it out to other users to be signed to fulfill a legal contract.

Details:

The user selects "Create NDA" from the dashboard, chooses from standard NDA templates or uses their own, and fills in fields for names, emails, and company names. The user can preview the document before sending and signing. Once submitted, the NDA moves to the "Pending" state and appears in the user's View Document.

Acceptance Criteria:

- The app provides a list of predefined NDA templates
- The app provides an option of using your own template
- Users can fill in all required information
- User can preview the NDA before publishing and signing
- When an NDA is signed by an Initiator and sent to a Receiver, the document will move to the "Pending" folder

Send NDA:

- As a user, I want to be able to send an NDA to another user so that they can either agree, edit, or sign the NDA.

Details:

The user has already created the NDA by pressing the "Create NDA" button, and they have filled in the required fields, signed it, and pressed the "Create" button. The user then enters the name of the text file and then enters in the email of the receiver/recipient, the user that they want to send the NDA to, and click the "Send" button.

Acceptance Criteria:

- User has already created, filled in required fields, and signed the NDA
- User has already named the NDA document, with proper file extension
- The user enters in a valid email for the recipient
- When the "Send" button is clicked, it sends the document to the entered recipient's email

Sign NDA:

- As a receiver, I want to be able to sign an existing NDA document that has already been signed by the initiator so that the document can be executed.

Details:

When a user (initiator) sends another user (receiver) an NDA document, the receiver should have the ability to sign this document if they accept its terms and want it to be an active legal document. The receiver should receive the NDA in their inbox, and upon selecting it, the user should have the ability to sign the document by selecting the "Sign" button. To ensure user identity, the receiver then must sign the document with an E-Signature, and upon doing so, the document will be moved into the "Active" section on both parties' accounts.

Acceptance Criteria:

- There is a "Sign" button below all documents received by a user
- The receiver must enter an E-Signature after selecting "Sign"
- Upon signing a document, the document will go to the "Active" section in both involved parties' dashboards.

Reject NDA:

- As a user, I want to be able to reject any NDA that is sent to me so that I have more control over what legal documents pertain to me.

Details:

When a user (initiator) sends another user (receiver) an NDA document, the receiver should have the ability to reject this document for whatever reason they see fit. The receiver should receive the NDA in their inbox, and upon selecting it, the user should have the ability to reject the document by selecting the "Reject" button. The receiver can also leave a comment as to why this document is being rejected, to which the initiator will receive this rejection notice in their inbox with the comment left by the receiver.

Acceptance Criteria:

- There is a "Reject" button below all documents received by a user
- The Receivers can leave a comment as to why this document is being rejected
- Upon rejecting a document, the Initiator that created said document will receive a notification in their inbox of its rejection attached with the rejectors comment

Pending:

As a user, I want to be able to access my pending NDAs (i.e. NDAs that are still waiting on the receiver to reject or sign them) to check whether they have expired or been signed/rejected.

Details:

The user has already logged in and selects "View NDAs" from the dashboard and selects "Pending" from the drop-down menu. They are then able to see which NDAs are still pending, expired, or signed/rejected.

Acceptance Criteria:

- The user has already logged in
- The "View NDA" button takes you to the popup
- The drop-down menu has the option "Pending", which opens another popup
- The NDAs have next to them a pointer differentiating them, i.e., which ones are still pending, expired, or signed/rejected

Receive NDA

- As a user, I want to be able to receive all documents that are sent to my account so that I can view and access all documents pertaining to my account.

Details:

When a user creates and signs an NDA, the user can send out this NDA to whoever they want to sign it. This receiver should receive this document in their inbox, to which they then have the option to sign or reject the document they've received.

Acceptance Criteria:

- When a document is sent out by an initiating user to a specific receiving user, that receiving user receives the document in their inbox

4.2 Use Cases

Use Case Name: Create Account

Primary Actor: NDA App User

Goal: Register new email account for new NDA App user, allowing them to log in and have access to their new account

Preconditions: User has access to an existing email address

Main Flow

1. User selects NDA App from downloaded app library
2. User selects "Create Account" from the Log in screen
3. App prompts user to enter email account they wish to register account with
4. System validated email is not already registered
5. System adds email to database
6. User is returned to Log in screen

Alternative Flow

4a. User enters an already registered email → Display an error and prompt user to retry or log in with entered email

Post Conditions: Email is now registered in database and user can log in with entered email

Use Case Name: Login

Primary Actor: NDA App User

Goal: To log into the NDA App to access personal documents and/or send NDAs from unique account

Preconditions: User has an email account registered with the NDA App database and is not currently logged in

Main Flow

1. User selects NDA App from downloaded app library
2. User enters email where prompted on the screen
3. System validates email exists in database
4. System sends verification code to entered email
5. User enters verification code and selects "Log in"
6. User is transferred to App Dashboard

Alternative Flow

4a. User enters invalid email → Display an error and prompt to retry or create an account

6a. User enters invalid verification code → Display an error and prompt to resend a new verification code

Post Conditions: User is signed in and has access to their dashboard

Use Case Name: View Profile

Primary Actor: NDA App User

Goal: To view the account information of the user that is currently signed into the NDA App

Preconditions: User has an email account registered with the NDA App database and is currently logged in

Main Flow

1. User is logged into the NDA App and in their Dashboard
2. Select profile picture in the top left corner
3. System will display account information screen with the following attributes of the signed in user: name, email, phone number, business/company

4. User can select any area outside of the account information box to return to the dashboard

Post Conditions: User can view their account information upon selecting the profile picture in dashboard

Use Case Name: Create/Sign NDA

Primary Actor: Verified NDA App User

Goal: To create an NDA with desired conditions and send it to desired recipients

Preconditions: User and recipients all have an email account registered with the NDA App database

Main Flow

1. User logs into NDA App with their account
2. User selects Create NDA from dashboard
3. User edits template to their liking
4. User selects "Create"
5. User names NDA file they have created
6. System validates name of text file
7. User enters email(s) of recipient(s)
8. System validates email(s) entered
9. NDA document is sent to recipient's inboxes in the NDA App and email notification is sent

Alternative Flow

6a. User enters invalid text name → Display an error and prompt to retry

9a. User enters invalid email → Display an error and prompt to retry

Post Conditions: Created NDA is moved to Pending tab for the sender and the inboxes of the recipient(s)

Use Case Name: Receive NDA

Primary Actor: Verified NDA App User

Goal: To receive an NDA that is sent to my specific NDA App account

Preconditions: User have an email account registered with the NDA App database

Main Flow

1. User logs into NDA App with their account
2. User selects inbox icon the top right corner
3. System displays NDAs that have been sent to the logged in account that have not been Signed or Rejected yet. Documents are displayed by name of sender (ex. "From John Doe")
4. User selects the circle next to the name of the document they want to review and selects "SELECT"
5. System displays full NDA document for users

Alternative Flow

3a. User does not have any NDAs awaiting their signature or rejection → No documents are viewable and "Folder is Empty" is displayed

4a. User selects back arrow icon → User is returned to their Dashboard

Post Conditions: User can access all documents sent to their unique account awaiting their signature or rejection by selecting the inbox icon in the top right corner of the Dashboard

Use Case Name: Sign Receive NDA

Primary Actor: Verified NDA App User

Goal: To sign a received NDA that is sent to my specific NDA App account

Preconditions: User have an email account registered with the NDA App database and has received an NDA awaiting their signature or rejection

Main Flow

1. User logs into NDA App with their account
2. User selects inbox icon the top right corner
3. User selects the circle next to the name of the document they want to review and selects "SELECT"
4. System displays full NDA document
5. User selects "SIGN" in the bottom right of the screen
6. System prompts user to enter their full legal name
7. User enters full legal name and selects "ENTER"
8. Document is removed from inbox and is moved to the "Active" folder in the "View NDAs" section of both the Sender and Signers accounts

Alternative Flow

4a. User selects back arrow icon → User is returned to their Dashboard

6a. User does not enter valid text → System displays error and prompts user to retry

Post Conditions: NDA Document is now legally binding and is viewable from both parties "Active NDA" folders

Use Case Name: Reject Receive NDA

Primary Actor: Verified NDA App User

Goal: To reject a received NDA that is sent to my specific NDA App account

Preconditions: User have an email account registered with the NDA App database and has received an NDA awaiting their signature or rejection

Main Flow

1. User logs into NDA App with their account
2. User selects inbox icon the top right corner
3. User selects the circle next to the name of the document they want to review and selects "SELECT"
4. Full NDA document is displayed by system
5. User selects "REJECT" in the bottom right of the screen
6. System prompts user to enter explanation of rejection
7. User enters explanation and selects "SEND"
8. Document is removed from inbox and sender gets an email notification of the document's rejection with the rejectors explanation attached

Alternative Flow

3a. User selects back arrow icon → User is returned to their Dashboard

8a. User does not enter valid explanation text → System displays error and prompts user to retry

Post Conditions: NDA Document is no longer viewable in the recipient's inbox and sender gets an email notifying them of the rejection with the explanation attached

Use Case Name: View Active NDAs

Primary Actor: Verified NDA App User

Goal: To view legally active NDAs that pertain to a user's account

Preconditions: User has an email account registered with the NDA App database

Main Flow

1. User logs into NDA App with their account
2. User selects "View NDAs" from dashboard
3. User selects "Active" from dropdown menu
4. List of Active documents (if any) are displayed in chronological order based on when the document was signed and named based on involved user
5. User can select which Active document to view by selecting the circle next to the document's name and then selecting "Select"
6. Full NDA document is displayed

Alternative Flow

5a. User does not have any Active documents → No documents are viewable and "Folder is Empty" is displayed

Post Conditions: All legally active documents pertaining to NDA App user are displayed in the "Active Document" tab upon selection

Use Case Name: View Inactive NDAs

Primary Actor: Verified NDA App User

Goal: To view expired NDAs that pertain to a user's account

Preconditions: User has an email account registered with the NDA App database

Main Flow

1. User logs into NDA App with their account
2. User selects "View NDAs" from dashboard
3. User selects "Inactive" from dropdown menu
4. List of Inactive documents (if any) are displayed in chronological order based on when the document was signed and named based on involved user
5. User can select which Inactive document to view by selecting the circle next to the document's name and then selecting "Select"
6. Full NDA document is displayed

Alternative Flow

5a. User does not have any Inactive documents → No documents are viewable and "Folder is Empty" is displayed

Post Conditions: All expired documents pertaining to NDA App user are displayed in the "Inactive Document" tab upon selection

Use Case Name: **View Pending NDAs**

Primary Actor: Verified NDA App User

Goal: To view pending NDAs sent by a user, waiting upon the signature or rejection of other user(s)

Preconditions: User has an email account registered with the NDA App database

Main Flow

1. User logs into NDA App with their account
2. User selects "View NDAs" from dashboard
3. User selects "Pending" from dropdown menu
4. List of Pending documents (if any) are displayed in chronological order based on when the document was sent out and named based on the given name of the document upon creation
5. User can select which Active document to view by selecting the circle next to the document's name and then selecting "Select"
6. Full NDA document is displayed

Alternative Flow

5a. User does not have any Pending documents → No documents are viewable "Folder is Empty" is displayed

Post Conditions: All pending documents pertaining to NDA App user are displayed in the "Pending Document" tab upon selection

Use Case Name: **Logout**

Primary Actor: NDA App User

Goal: To log out of the signed in NDA App account and return to the Log in screen

Preconditions: User has an email account registered with the NDA App database and is currently signed in

Main Flow

1. User is signed into an existing NDA App account and is in their Dashboard
2. User selects the Exit Door icon in the bottom left corner
3. System prompts user with a verification message to ensure they actually want to log out
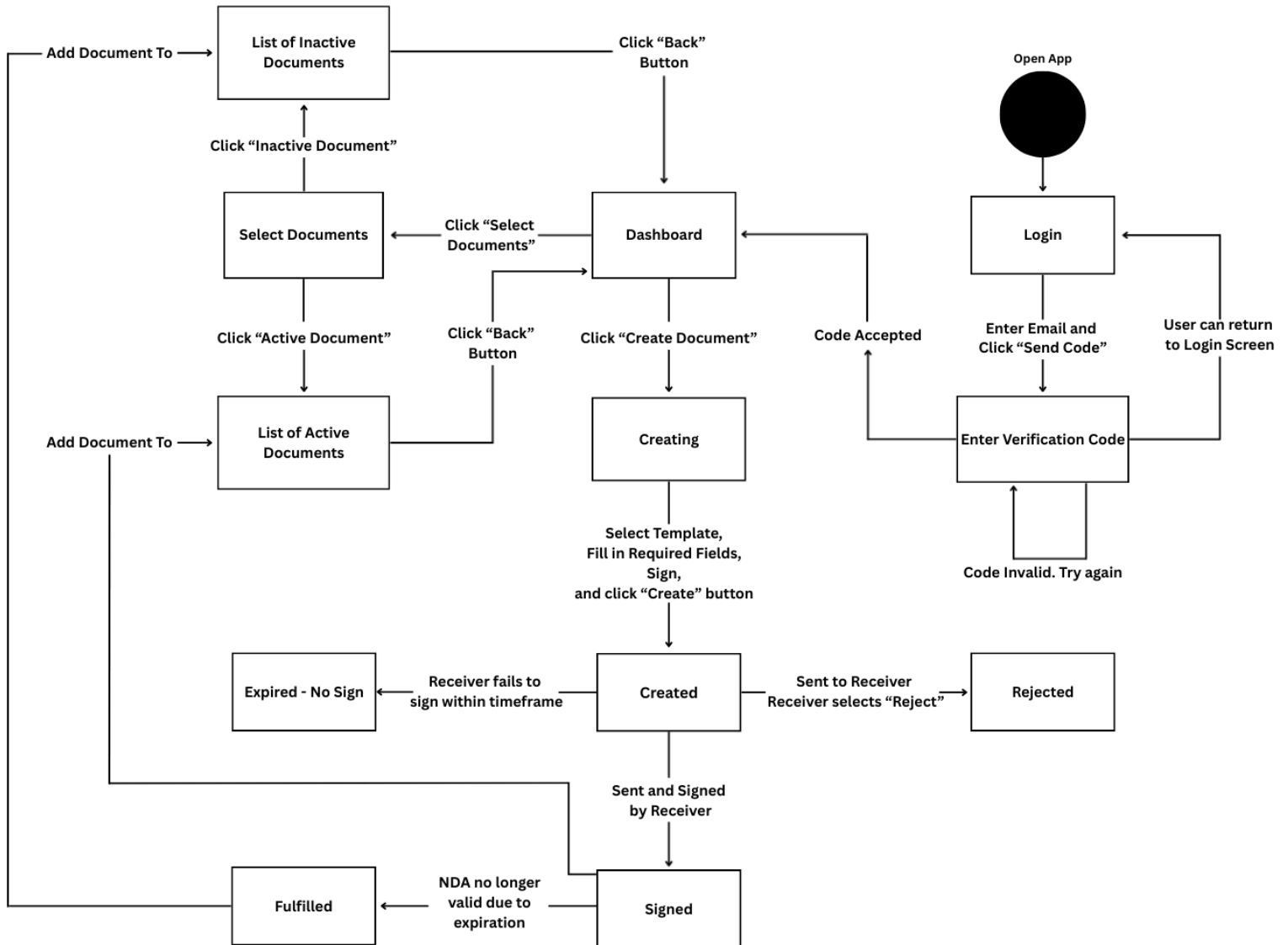4. User selects "Logout"

5. System returns User to the log in screen

Alternative Flow

4a. User selects "Cancel" → User is returned to the Dashboard of the already signed in
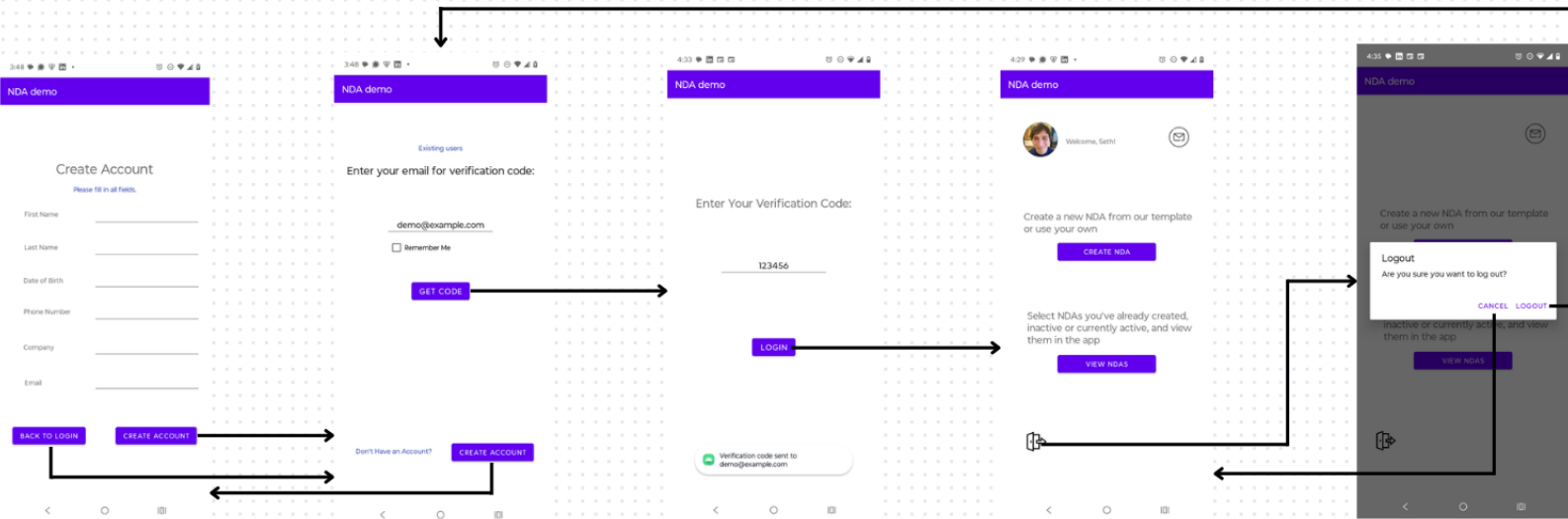
Post Conditions: Screen displays log in screen with no account currently signed in
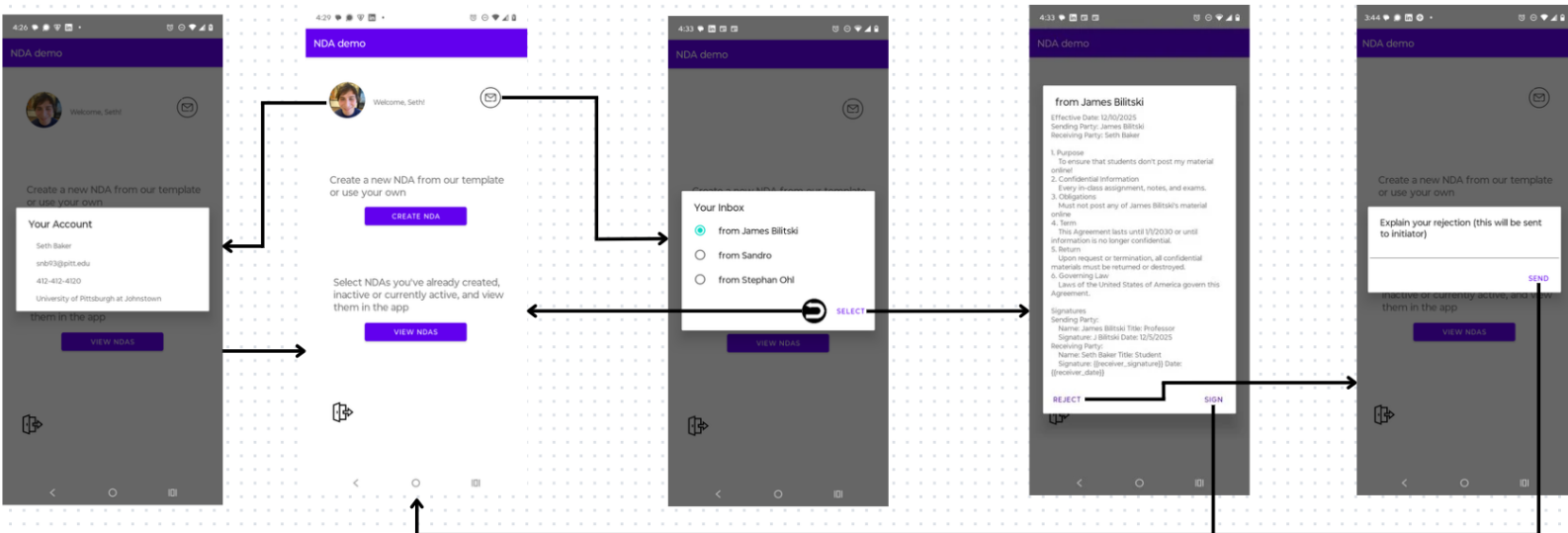
4.3 State Diagram

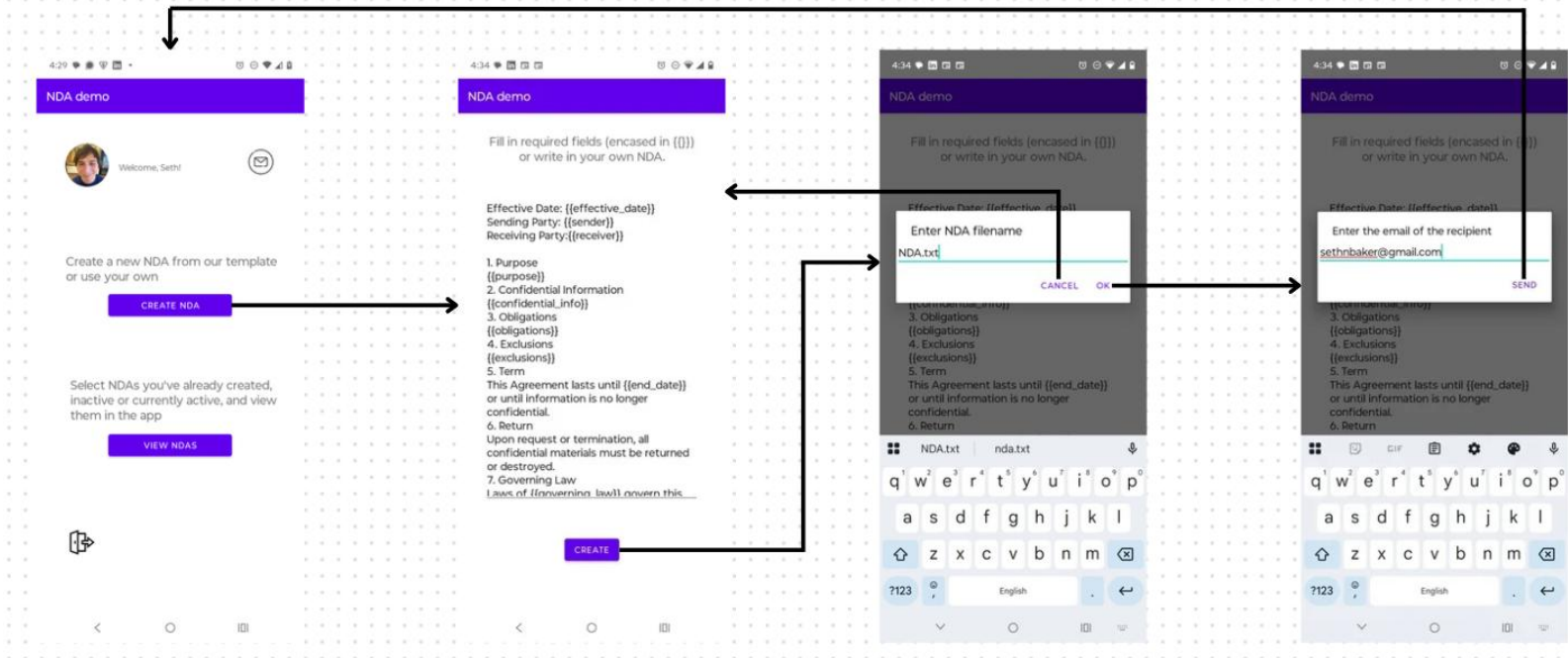## **4.4 Wire flow**

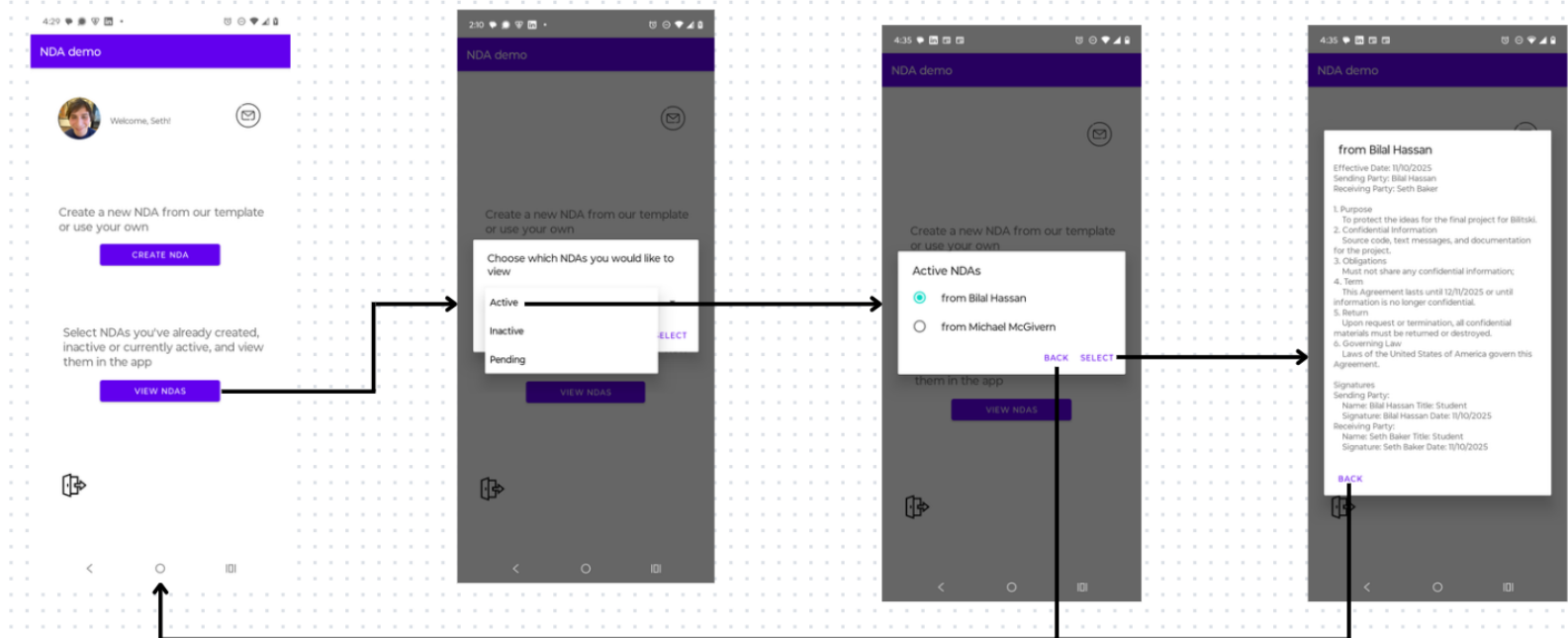Login and Logout

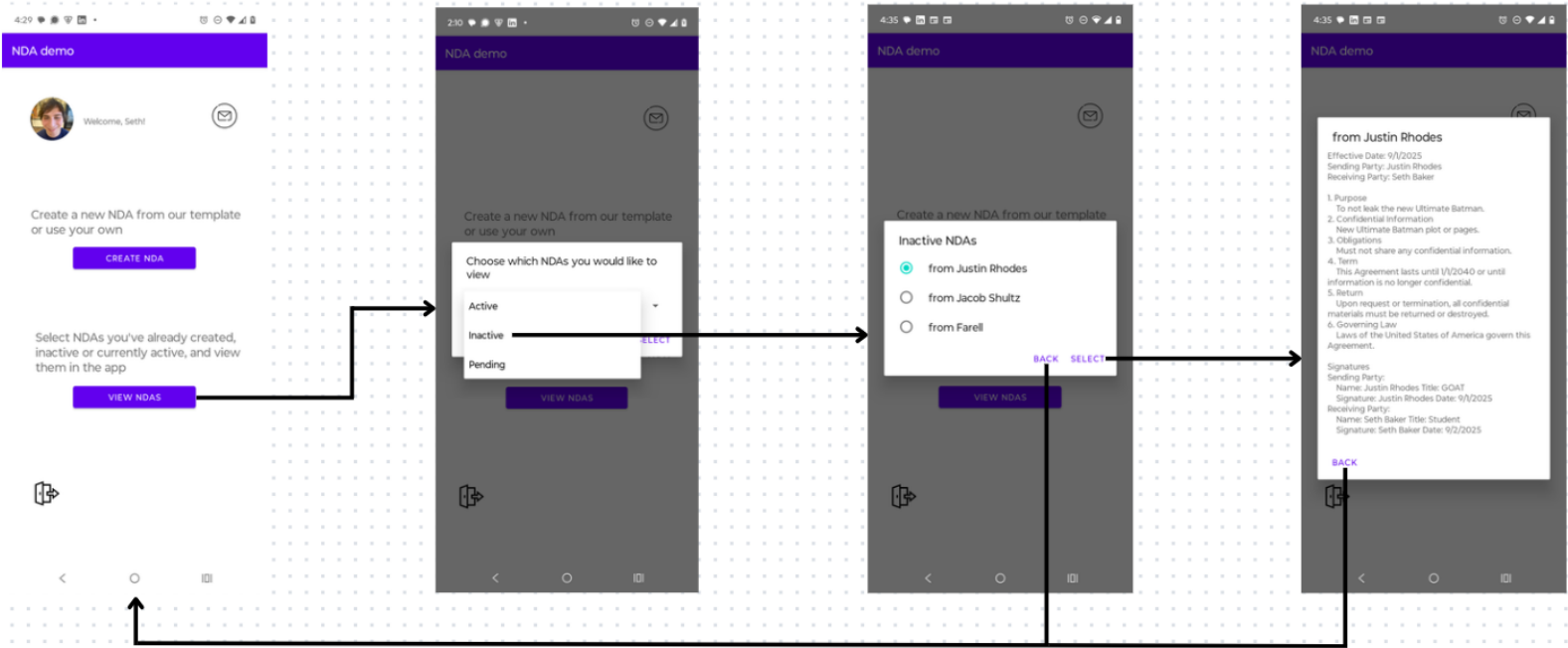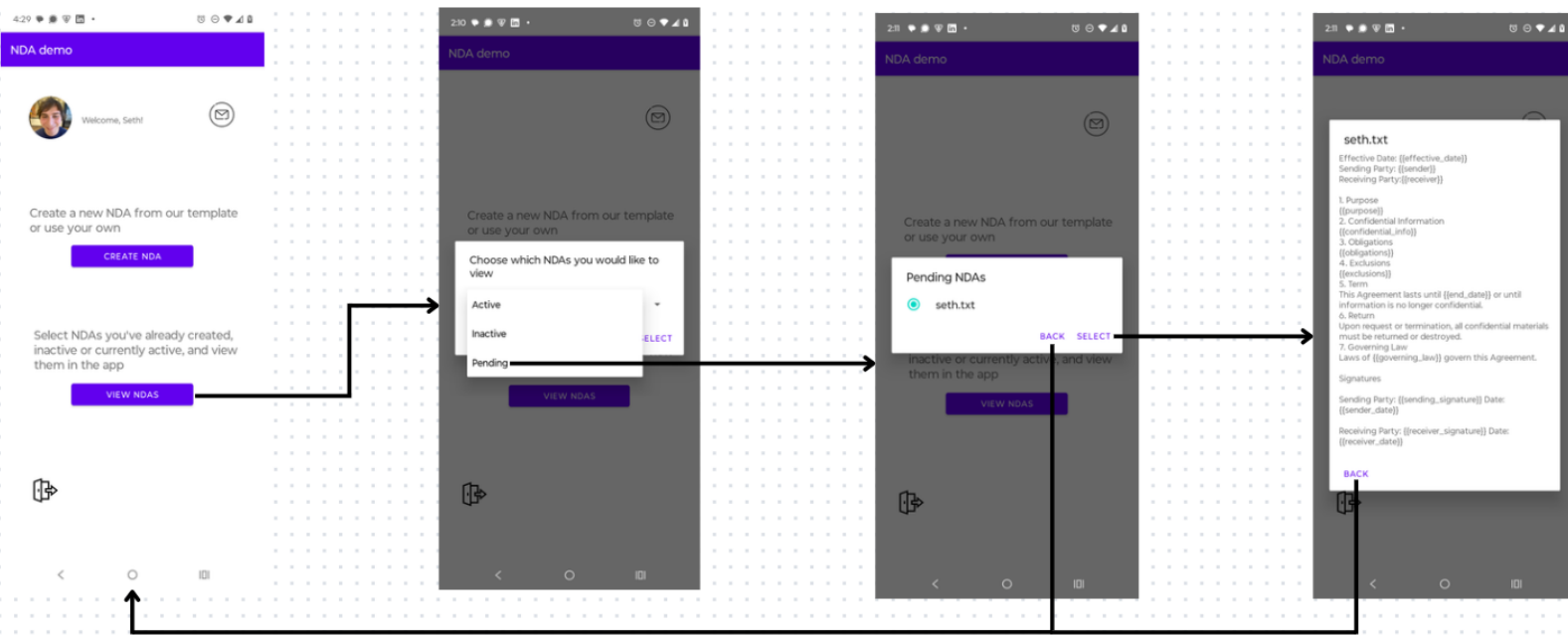Inbox and Your Account

Create NDA

Active NDAs

Inactive NDAs

Pending NDAs

5 Non-Functional Requirements

Non-functional requirements define how well the system must perform its functions rather than what those functions are. These requirements establish standards for performance, usability, security, and reliability that the NDA App must meet to provide users with a quality experience.

5.1 Performance

- **5.1.1 NDA Creation Response Time**
  - **Description**: Creating a new NDA from a template and transitioning to the edit screen must complete within 2 seconds
  - **Rationale:** Users expect immediate feedback when initiating a new task. Delays longer than 2 seconds can lead users to believe the application has malfunctioned, resulting in frustration and potential abandonment of the task. A 2-second response time ensures the application feels responsive while keeping users engaged in the workflow.

- **5.1.2 Document Loading Time**
  - **Description**: Opening an existing NDA for viewing or editing must load within 4 seconds regardless of document complexity.
  - **Rationale:** Users frequently need quick access to their documents, particularly during meetings or when referencing specific information. A 4-second limit provides sufficient time for the system to retrieve and display complex documents while remaining fast enough to prevent user impatience. Longer delays may cause users to perceive the application as unresponsive or frozen.

- **5.1.3 Dashboard Load Performance**
  - **Description**: The main dashboard displaying active and completed NDAs must load within 4 seconds, even when displaying up to 100 documents.
  - **Rationale:** The dashboard is the first thing you see when you open the app, so it's got to load fast. People who use the app a lot and have many NDAs shouldn't get punished with slow loading times. Most users won't have more than 100 documents anyway, so this covers pretty much everyone while keeping things realistic.

5.2 Usability

- **5.2.1 User-Friendly Navigation**
  - **Description:** New users must be able to complete their first NDA creation or signing task within 10 minutes without external help.

- o **Rationale:** The navigation must be simple, as this is a replacement for using paper NDAs; if it's not user-friendly, then customers would just prefer using a paper NDA.

- **5.2.2 Error Message Clarity**
  - o **Description:** Error messages must clearly explain what went wrong and provide actionable guidance on how to resolve the error. They should be concise and avoid technical jargon.
  - o **Rationale:** If the user runs into an error, they will be able to solve it easily without any external help

- **5.2.3 Responsive Design**
  - o **Description:** All app features and formatting should work properly on both Android and iOS
  - o **Rationale:** The user can create NDAs and use other features regardless of whether they are using the Android or IOS version of the app

5.3 Security

- **5.3.1 Digital Signature Authentication**
  - o **Description:** The application must verify the authenticity of all digital signatures using cryptographic verification methods. Signatures must be tamper-proof and legally binding.
  - o **Rationale:** To ensure that NDAs are legally enforceable and cannot be modified after signing.

- **5.3.2 Data Encryption**
  - o **Description:** All sensitive data, including personal information, document contents, and digital signatures, must be encrypted using RSA
  - o **Rationale:** To protect user data from unauthorized access and maintain privacy and confidentiality

- **5.3.3 Two-Factor Authentication**
  - o **Description:** Users must authenticate via a two-factor authentication mechanism when logging in. The system must support email verification-based codes
  - o **Rationale:** To enhance user security and prevent unauthorized access to user accounts

5.4 Reliability

- ### 5.4.1 Application Crash Rate
    - **Description:** The app should run 99% of the time without crashing
    - **Rationale:** Shows app stability, directly affecting user retention, ratings, and revenues.

- ### 5.4.2 Data Backup and Recovery
    - **Description:** The system must perform daily backups of all user data, including documents, and provide the ability to restore data to any point within the last 30 days.
    - **Rationale:** To ensure that data is protected from accidental loss or corruption, and that it can easily be restored in the event of system failure