| Use case ID  Use case name | UID 1  Sign up |
| --- | --- |
| Description | Actor wants to sign up. |
| Actors | User. |
| Priority | High. |
| Pre-condition | User has no account. |
| Post-condition | User created an account successfully. |
| Main flow | 1. Start when the actor clicks “Sign up” button 2. System pops up sign-up form.  3. User fills it and submits.  4. System checks the form, creates a new account and notifies the actor.  5. System redirects to sign in form. |
| Alternative flow | 4.1. User already had an account, and notified the actor.  4.2. If the form is invalid, ask the actor to refill the form again. |
| Non-functional Requirement | - Request takes no longer than 1 min. |

| Use case ID  Use case name | UID 2  Forgot password. |
| --- | --- |
| Description | User wants to get a new password. |
| Actors | User, Admin. |
| Priority | High. |
| Pre-condition | User has an account and forgets the password. |
| Post-condition | User got a new password successfully. |
| Main flow | 1. Start when actor clicks “Forgot  password?” button.  2. System pops up a forgot-password form  3. User fills it and submit  4. System sends a code to the email that the actor inputted and shows a verification form .  5. User inputs code and submit .  6. System checks, creates a new password and notifies the user .  7. System redirects the user to sign in form. |
| Alternative flow | 3.1. Account isn’t exist, the system redirects the actor to sign in form .  6.1. If invalid code, the system redirects the actor to sign in form. |
| Non-functional Requirement | - Request takes no longer than 1 min. |

| Use case ID  Use case name | UID 4  Sign in with email. |
| --- | --- |
| Description | User wants to sign in with email. |
| Actors | User, Admin. |

| Priority | High. |
| --- | --- |
| Pre-condition | User has an account. |
| Post-condition | User signed in with an email. |
| Main flow | 1. Start when the actor clicks the “Sign in” button.  2. System pops up a login form.  3. User fills in the form and submits .  4. System checks account, if account is correct, system redirects actor to dashboard. |
| Alternative flow | 4.1. Invalid account, notifies wrong account and system redirect actor to sign in form  4.2. If 2FA is active, the system redirects the actor to the 2FA form. |
| Non-functional Requirement | - Request takes no longer than 1 min. |

| Use case ID  Use case name | UID 5  Sign in with Google. |
| --- | --- |
| Description | User wants to sign in with a google account. |
| Actors | User. |
| Priority | Medium. |
| Pre-condition | User has a google account. |
| Post-condition | User signed in with a google account. |
| Main flow | 1. Start when the actor clicks the “Sign in with Google” button .  2. System redirects to google authentication page .  3. User fills google form and login 4. Google will call back and the system checks it .  5. If it’s valid, the system redirects the actor to the account dashboard. |
| Alternative flow | 5.1. If an account is not signed up, the system will create an account and redirect the actor to the dashboard .  5.2. If invalid account, the system redirects the actor to sign in form. |
| Non-functional Requirement | - Request takes no longer than 1 min. |

2/Account

| Use case ID  Use case name | UID 6  Add Friend. |
| --- | --- |
| Description | User wants to add another Actor to friend list. |
| Actors | User, Admin. |
| Priority | Medium. |
| Pre-condition | User already signed in. |
| Post-condition | User added friends successfully. |
| Main flow | 1. Start when the actor clicks the “+’’ button on another user account.  2. System will ask if another actor wants to accept the request.  3. Another user clicks yes.  4. The system will add another actor to the friend list. |
| Alternative flow | 3.1. Another actor clicks no.  3.2 The system ends . |
| Non-functional Requirement | - Request takes no longer than 1 min. |

| Use case ID  Use case name | UID 7  View friend list. |
| --- | --- |
| Description | Actor wants to view his/her friend list. |
| Actors | High. |
| Priority | User, Admin. |
| Pre-condition | User already signed in. |
| Post-condition | User views his/her friend list successfully . |
| Main flow | 1. Start when the actor clicks the “My friend list” button.  2. System pops up a friends list form . |
| Alternative flow | 2.1 If the user doesn’t have any friend, the system will pop up a blank form and text “you have no friend :((“. |
| Non-functional Requirement | - Request takes no longer than 1 min. |

| Use case ID  Use case name | UID 8  Turn on/off 2FA. |
| --- | --- |
| Description | Actor wants to turn 2FA on/off. |
| Actors | High. |
| Priority | User, Admin. |
| Pre-condition | User already signed in. |
| Post-condition | User turned on/off 2FA successfully . |
| Main flow | 1. Start when the actor clicks the “2FA” button.  2. System asked if the actor wanted to turn 2FA on/off.  3. The user clicks yes.  4.The system will turn the 2FA on/off . |
| Alternative flow | 3.1 User clicks no button.  4.1 The system returns the actor to the dashboard. |
| Non-functional Requirement | - Request takes no longer than 1 min. |

| Use case ID  Use case name | UID 9  Change password. |
| --- | --- |
| Description | Actors want to change their password. |
| Actors | User, Admin. |
| Priority | High. |
| Pre-condition | User already signed in. |
| Post-condition | Edited finish changed password. |
| Main flow | 1. Start when the actor clicks the “Change password” button .  2. System pops up a “change password” form .  3. User fill it and submit .  4. System check form .  5. If it’s valid form, the system updates data in the database and notifies the actor. |
| Alternative flow | 3.1. If user cancels submit, the system redirects the user to the previous page .  5.1. If it’s invalid form, the system notifies the actor. |
| Non-functional Requirement | - Request takes no longer than 1 min. |

| Use case ID  Use case name | UID 10  Profile. |
| --- | --- |
| Description | User wants to view their profile. |
| Actors | User, Admin. |
| Priority | Actor already signed in. |
| Pre-condition | Actor view profile successfully. |
| Post-condition | High. |
| Main flow | 1. Start when the actor clicks the “View Profile” button.  2. System pops up an user profile. |

|  |  |
| --- | --- |
| Alternative flow | 2.1 Actor doesn’t have a profile, the system pops up blank form and text:”You don't have any profile”. |
| Non-functional Requirement | - Request takes no longer than 1 min. |

3/WorkSpace

| Use case ID  Use case name | UID 11  Remove members. |
| --- | --- |
| Description | The Actors want to remove members . |
| Actors | User, Admin. |
| Priority | High. |
| Pre-condition | Actor already signed in. |
| Post-condition | Actor removes it successfully. |
| Main flow | 1. Start when the actor clicks the “Remove member” button .  2. System pops up a member list.  3. User chooses the member and removes that member.  4. System removes the choiced member. |
| Alternative flow | 3.1. User doesn’t want to remove members.  4.1 System return the dashboard. |
| Non-functional Requirement | - Request takes no longer than 1 min. |

| Use case ID  Use case name | UID 12  View member. |
| --- | --- |
| Description | The user wants to view all the members. |
| Actors | User, Admin. |
| Priority | High. |
| Pre-condition | User already signed in. |
| Post-condition | User views his/her member successfully. |
| Main flow | 1. Start when the actor clicks “view member”.  2. System pops up member form. |
| Alternative flow | 2.1. User doesn’t have any members.  3.1 The system pops up text: ”you don’t have any members”. |
| Non-functional Requirement | - Request takes no longer than 1 min. |

| Use case ID  Use case name | UID 13  Create a workspace. |
| --- | --- |
| Description | The Actors want to create the workspace. |
| Actors | User. |
| Priority | High. |
| Pre-condition | Actor already signed in . |
| Post-condition | Actor creates a workspace successfully. |
| Main flow | 1. Start when the actor clicks the “create workspace” button.  2. System pops up to create a workspace form.  3. Actor fills the form.  4. System check form .  5. If it’s valid form, the system will create the workspace.  6. If it’s invalid form, the system will notify the actor. |
| Alternative flow | 3.1. Actor doesn’t want to create a workspace..  4.1 System return to dashboard. |
| Non-functional Requirement | - Request takes no longer than 1 min. |

| Use case ID  Use case name | UID 15  Add member. |
| --- | --- |
| Description | Actor wants to add members to the workspace. |
| Actors | User. |
| Priority | High. |
| Pre-condition | User already signed in, but the member isn't in the workspace. |
| Post-condition | User added members successfully. |
| Main flow | 1. Start when the actor clicks the “add” button.  2. System pop ups the member form  3. User fills the form.  4. System will fetch the database and search that member’s id.  5. System will ask that member if he/she wants to join the workspace.  6.That member clicks yes, the system adds that member to the workspace. |
| Alternative flow | 4.1 System can’t find the id and notify the actor.  6.1 That member clicks no, the system notifies the user . |
| Non-functional Requirement | - Request takes no longer than 1 min. |

| Use case ID  Use case name | UID 16  Setting |
| --- | --- |
| Description | User wants to set up a workspace. |
| Actors | User |
| Priority | High |
| Pre-condition | User already has a workspace. |
| Post-condition | User setting successfully. |
| Main flow | 1. Start when clicking the “setting’ button.  2. System will pop up setting-form.  3. User changes the preset and saves.  4. System update user’s new preset.  5. Return to the workspace. |
| Alternative flow | 3.1 User doesn’t change any preset and returns to workspace. |
| Non-functional Requirement | - Request takes no longer than 1 min. |

| Use case ID  Use case name | UID 17  Rename workspace |
| --- | --- |
| Description | Actor want to rename workspace |
| Actors | User |
| Priority | High |
| Pre-condition | User already signed in, and has a workspace. |
| Post-condition | User renames the workspace successfully. |
| Main flow | 1. Start when the actor clicks “rename workspace”.  2. System pop ups the rename form  3. User fills the form.  4. System will ask if the actor wants to change the workspace name.  5. User clicks yes, the system adds that member to the workspace. |
| Alternative flow | 3.1 User doesn’t want to change the workspace name.  3.2 System return to dashboard.  5.1 User clicks no, system returns to dashboard. |
| Non-functional Requirement | - Request takes no longer than 1 min |

| Use case ID  Use case name | UID 17  Rename workspace |
| --- | --- |
| Description | Actor wants to rename the workspace. |
| Actors | User |
| Priority | High |
| Pre-condition | User already signed in, and has a workspace. |
| Post-condition | User rename workspace successfully |
| Main flow | 1. Start when the actor clicks “rename workspace”.  2. System pop ups the rename form  3. User fills the form.  4. System will ask if the actor wants to change the workspace name.  5.User click yes, the system adds that member to the workspace. |
| Alternative flow | 3.1 User doesn’t want to change the workspace name.  3.2 System return to dashboard.  5.1 User clicks no, system returns to dashboard. |
| Non-functional Requirement | - Request takes no longer than 1 min. |

4/**Expenditure Management**

| Use case ID  Use case name | UID 18  Add Transaction |
| --- | --- |
| Description | Actor wants to add a transaction. |
| Actors | User |
| Priority | High |
| Pre-condition | User already signed in, have workspace. |
| Post-condition | User added the transaction successfully. |
| Main flow | 1. Start when the actor clicks “add transaction”.  2. System pop ups the new transaction form.  3. User fills the form.  4. System will ask if the actor wants to add that transaction.  5. User clicks yes, the system adds that Transaction to the database, and informs the user. |
| Alternative flow | 3.1 User fills wrong input, system notifies actor.  5.1 User clicks no, system returns to workspace. |
| Non-functional Requirement | - Request takes no longer than 1 min |

| Use case ID  Use case name | UID 19  Delete Transaction |
| --- | --- |
| Description | Actor wants to delete the transaction. |
| Actors | User |
| Priority | High |
| Pre-condition | Actors already signed in, have workspace. |
| Post-condition | Actor deleted the transaction successfully. |
| Main flow | 1. Start when the actor clicks “delete transaction”.  2. System shows the transaction list in the database.  3. User chooses the transaction the actor wants to delete.  4. System will ask if the actor wants to delete that transaction.  5. User clicks yes, the system deletes that transaction to the database, and notifies the user. |
| Alternative flow | 5.1 User clicks no, system return to dashboard |
| Non-functional Requirement | - Request takes no longer than 1 min |

| Use case ID  Use case name | UID 20  Transaction Statistic |
| --- | --- |
| Description | Actor wants to see transaction statistic |
| Actors | User |
| Priority | High |
| Pre-condition | User already signed in, and has a workspace. |
| Post-condition | User sees transaction statistics successfully. |
| Main flow | 1. Start when the actor clicks “ transaction statistic”.  2. System calculates transactions and shows the statistics to the actor. |
| Alternative flow | 2.1 System can’t calculate transaction, notify user. |
| Non-functional Requirement | - Request takes no longer than 1 min. |

| Use case ID  Use case name | UID 21  Edit Transaction |
| --- | --- |
| Description | Actor wants to edit the transaction. |
| Actors | User |
| Priority | High |
| Pre-condition | User already signed in, and has a workspace. |
| Post-condition | User edited the transaction successfully. |
| Main flow | 1. Start when the actor clicks “ edit transaction”.  2. System pops up the form.  3. User fills the edit form.  4. System stores edited transaction to the database, returning the user to workspace. |
| Alternative flow | 3.1 User fills wrong input, system notifies actor. |
| Non-functional Requirement | - Request takes no longer than 1 min. |

| Use case ID  Use case name | UID 22  Search Transaction |
| --- | --- |
| Description | Actor wants to search transaction |
| Actors | User |
| Priority | High |
| Pre-condition | User already signed in, and has a workspace. |
| Post-condition | User search transaction successfully. |
| Main flow | 1. Start when the actor clicks “ search transaction”.  2. User fills in the transaction name.  3. System return list of transactions. |
| Alternative flow | 3.1 System can’t find transactions. |
| Non-functional Requirement | - Request takes no longer than 1 min |

| Use case ID  Use case name | UID 23  Edit currency |
| --- | --- |
| Description | Actor wants to edit workspace currency. |
| Actors | User |
| Priority | High |
| Pre-condition | User already signed in, have workspace. |
| Post-condition | User changed currency successfully. |
| Main flow | 1. Start when the actor clicks “Edit currency”  2. User chooses currency given by the system.  3. System save new setting to database, return user to workspace. |
| Alternative flow | 2.1 User doesn’t want to change currency, return use to workspace. |
| Non-functional Requirement | - Request takes no longer than 1 min |