Bilinguo

Use-Case Specification

Version 1.4

Revision History

| **Date** | **Version** | **Description** | **Author** |
| --- | --- | --- | --- |
| 21/04/2024 | 1.0 | Modeling Use-case diagram | Trần Minh Triết |
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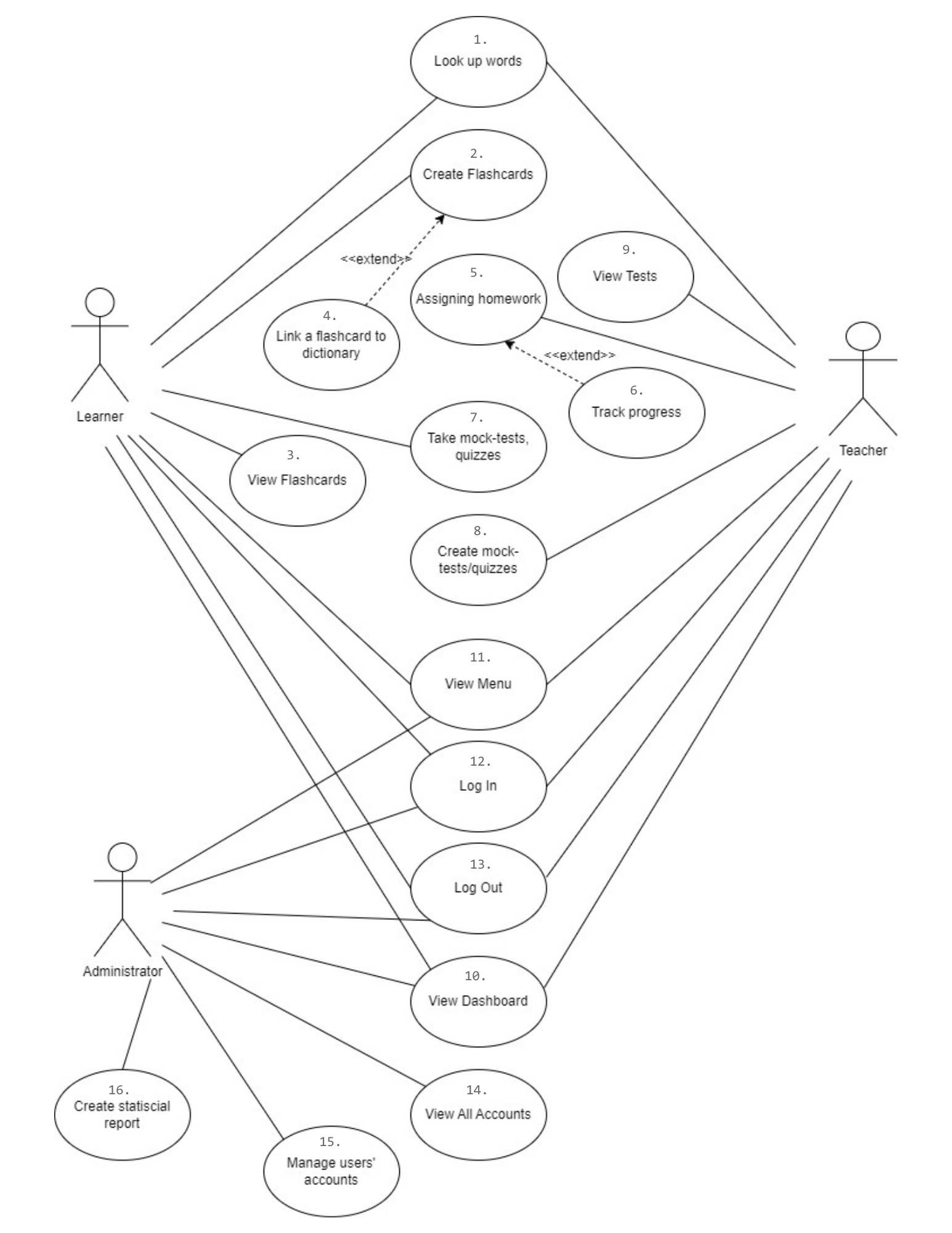
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# Use-case Model



# Use-case Specifications

## Use-case: Lookup words

| No. | 1 |
| --- | --- |
| Use case Name | Lookup words |
| Brief description | This use case describes how the User can search a word |
| Actors | Learner  Teacher |
| Basic Flow | 1. At the homepage, the user enters keywords on the ‘Search’ field 2. Users clicks on ‘Search’ button to start searching a word 3. The system displays the found word and its meaning 4. User clicks ‘Add to flashcard library’ button on the expected word 5. System adds a new word to flashcard library 6. System display flashcards library |
| Alternative Flows | **Alternative flow 1: User cannot find word searched**   1. From #1 of the basic flow, user enters another word 2. Continue step #2 in the basic flow   **Alternative flow 2: Flashcards library has already had the word**   1. From #5 of the basic flow, system announce already exists in the flashcards library 2. Back to step #3 of the basic flow |
| Pre-conditions | User goes to homepage at [www.bilinguo.com.vn](http://www.hailua.com.vn) |
| Post-conditions | The user successfully finds the meaning of word and adds new word to the flashcards library. |

## Use-case: Create Flashcards

| No. | 2 |
| --- | --- |
| Use case Name | Create Flashcards |
| Brief description | This use case outlines how users can create flashcards to memorize words. |
| Actors | Learner |
| Basic Flow | 1. User selects the option to create a new flashcard. 2. User enters the word they want to memorize in the designated field. 3. User enters the corresponding meaning or definition of the word in the provided space. 4. User saves the flashcard. 5. System displays all flashcards in library |
| Alternative Flows | **Alternative flow 1: User cancels flashcard creation.**   1. From #5 of the basic flow, User chooses to cancel the creation of the flashcard, discarding any entered information.   **Alternative flow 2: User edits an existing flashcard.**   1. From #5 of the basic flow, User selects the option to edit a previously created flashcard. 2. Back to step #2 of the basic flow   **Alternative flow 3: Flashcards library has already had the word**   1. From #2 of the basic flow, system announce already exists in the flashcards library. User enter another word. |
| Pre-conditions | User goes to homepage at [www.bilinguo.com.vn](http://www.hailua.com.vn) |
| Post-conditions | A new flashcard is created with the specified word and its corresponding meaning. The flashcard is available for the user to review and memorize. |

## Use-case: View Flashcards

| No. | 3 |
| --- | --- |
| Brief description | This use case describes how users can view the flashcards they have created to review and memorize words. |
| Actors | Learner |
| Basic Flow | 1. User navigates to the flashcards library from the homepage. 2. System displays a list of all flashcards available in the user's library. 3. User selects a flashcard to view its details. 4. System displays the selected flashcard with the word and its corresponding meaning or definition. |
| Alternative Flows | **Alternative flow 1: No flashcards available in the library.**   1. From step #2 of the basic flow, if there are no flashcards in the library, the system displays a message indicating that there are no flashcards available. 2. User has the option to create new flashcards.   **Alternative flow 2: User wants to edit a flashcard while viewing.**   1. From step #4 of the basic flow, User selects the option to edit the flashcard. 2. System allows the user to modify the word or its meaning. 3. User saves the changes. 4. System updates the flashcard and displays the updated information.   **Alternative flow 3: User wants to delete a flashcard while viewing.**   1. From step #4 of the basic flow, User selects the option to delete the flashcard. 2. System prompts the user to confirm the deletion. 3. User confirms the deletion. 4. System removes the flashcard from the library and updates the list of flashcards. |
| Pre-conditions | User is logged into their account on www.bilinguo.com.vn.  User has created at least one flashcard, unless considering Alternative Flow 1. |
| Post-conditions | User successfully views the details of the selected flashcard.  If applicable, the flashcard is edited or deleted based on user actions. |

## 

## Use-case: Link flashcards to the dictionary

| No. | 4 |
| --- | --- |
| Use case Name | Link flashcards to the dictionary |
| Brief description | This use case outlines the functionality of linking flashcards to a dictionary, allowing learners to access definitions, translations, and additional information for the words featured on the flashcards. |
| Actors | Learner |
| Basic Flow | 1. The learner accesses the flashcards feature within the language learning platform. 2. While reviewing flashcards, the learner encounters a word they want to explore further. 3. The learner selects the word on the flashcard, indicating their intent to access additional information. 4. The system recognizes the selection and prompts the learner with an option to view more details from the dictionary. 5. Upon selecting the option, the system links the selected word to the integrated dictionary feature. 6. The learner is presented with relevant information from the dictionary, including:  * Definitions of the word in the target language. * Translations of the word into other languages, if available. * Pronunciation guides or audio clips for the word's pronunciation. * Examples of usage in context. * Synonyms, antonyms, and related words.  1. The learner reviews the information provided by the dictionary to deepen their understanding of the word and its usage. 2. After exploring the dictionary entry, the learner can return to the flashcards or continue exploring other words. |
| Alternative Flows | **Alternative Flow: None** |
| Pre-conditions | Learner accesses the flashcards feature.  Integrated dictionary feature is available within the language learning platform. |
| Post-conditions | The learner seamlessly accesses additional information about words featured on flashcards through integration with the dictionary, enhancing their vocabulary acquisition and understanding of language usage. |

## Use-case: Assigning homework

| No. | 5 |
| --- | --- |
| Use case Name | Assigning homework |
| Brief description | This use case outlines how teachers can assign homework to students for scoring. |
| Actors | Teacher  Learner |
| Basic Flow | 1. The teacher accesses the homework assignment feature. 2. The teacher creates a new homework assignment, specifying details such as title, instructions, due date, pọint ladder and any attached materials. 3. The homework assignment is sent to the learners. 4. Learners receive notification of the assigned homework. 5. Learners complete the homework before the due date. 6. Learners submit their completed homework. 7. System evaluates and scores the submitted homework. |
| Alternative Flows | **Alternative flow 1: Teacher modifies an existing homework assignment.**   1. From #3 of the basic flow, the teacher selects an existing homework assignment to modify. 2. Back to step #2 of the basic flow   **Alternative flow 2: Student requests extension for the homework.**   1. From #4 of the basic flow, student requests an extension for the homework before the due date. 2. The teacher reviews the request and decides whether to grant the extension or not. |
| Pre-conditions | User goes to homepage at [www.bilinguo.com.vn](http://www.hailua.com.vn) |
| Post-conditions | The assigned homework is completed and submitted by the students. The teacher evaluates and scores the homework submissions, providing feedback as necessary. |

## Use-case: Tracking progress

| Use case Name | Assigning homework |
| --- | --- |
| Brief description | This use case outlines how users can track their progress in learning new words or completing assignments. |
| Actors | Teacher  Learner |
| Basic Flow | 1. The user accesses the progress tracking feature. 2. The user selects the type of progress they want to track, such as learning new words or completion of assignments. 3. For learning new words:  * The system displays statistics on the number of words learned, words yet to be learned, and overall progress. * The user can view a breakdown of their learning progress over time, including charts or graphs illustrating their improvement.  1. For assignment completion:  * The system provides a summary of completed assignments, including scores and feedback received. * The user can review their performance on individual assignments and track their overall progress.  1. The user can customize the view to focus on specific time periods or types of activities. |
| Alternative Flows | **Alternative flow 1: User sets specific learning goals.**   1. From #5 of the basic flow, the user sets specific learning goals, such as mastering a certain number of words within a specified time frame. 2. The system tracks progress towards these goals and provides updates to the user. |
| Pre-conditions | User goes to homepage at [www.bilinguo.com.vn](http://www.hailua.com.vn) |
| Post-conditions | The user gains insights into their learning or assignment completion progress, enabling them to identify areas for improvement and track their overall development over time. |

## Use-case: Taking mock tests

| No. | 7 |
| --- | --- |
| Use case Name | Taking mock tests |
| Brief description | This use case describes how users can take mock tests, answering either parts of the questions or the entire test, and subsequently review their test history. |
| Actors | Teacher  Learner |
| Basic Flow | 1. The user selects the option to take a mock test. 2. The system presents the questions. 3. The user answers the questions. 4. Once completed, the user submits the test for scoring. 5. The system scores the test and provides feedback to the user. 6. The user reviews their test performance and the correct answers. 7. The system records the test attempt in the user's test history. |
| Alternative Flows | **Alternative flow 1: User decides to pause the test.**   1. From #3 of the basic flow, the user can chooses to pause the test midway. 2. The user can either resume the test later or discard the progress. |
| Pre-conditions | User goes to homepage at [www.bilinguo.com.vn](http://www.hailua.com.vn) |
| Post-conditions | The user receives a score for the completed test and can review their performance and the correct answers. The test attempt is recorded in the user's test history. |

## Use-case: Create mock tests

| No. | 8 |
| --- | --- |
| Use case Name | Create mock tests |
| Brief description | This use case outlines how users can design tests to practice and assess their level. |
| Actors | Teacher  Learner |
| Basic Flow | 1. The user accesses the feature to create mock tests. 2. The user specifies the details of the mock test, such as the title, instructions, duration, and types of questions (e.g., multiple choice, essay, true/false). 3. The user selects or creates the questions to include in the mock test. This can involve choosing from a pre-existing question bank or adding new questions. 4. The user arranges the questions in the desired order within the test. 5. The user saves the mock test. 6. System displays existing mock tests. |
| Alternative Flows | **Alternative flow 1: User modifies an existing mock test.**   1. From #6 of the basic flow, the user selects an existing mock test to modify. 2. The user edits the details, instructions, or questions of the mock test. 3. The modified mock test is saved as a new version.   **Alternative flow 2: User shares the mock test with others.**   1. From #6 of the basic flow, the user chooses to share the mock test with other users. 2. The mock test is made accessible to selected individuals or groups. |
| Pre-conditions | User goes to homepage at [www.bilinguo.com.vn](http://www.hailua.com.vn) |
| Post-conditions | The user successfully creates a mock test with the specified details and questions. The mock test is available for practice and assessment purposes. |

## Use-case: View Tests

| No. | 9 |
| --- | --- |
| Use case Name | View Tests |
| Brief description | This use case describes how users can view the list of available mock tests, including their details, and choose a test to take or review. |
| Actors | Teacher  Learner |
| Basic Flow | 1. The user navigates to the tests section from the homepage. 2. The system displays a list of available mock tests. 3. The user selects a mock test from the list to view its details. 4. The system displays the details of the selected mock test, including the title, instructions, duration, and type of questions. |
| Alternative Flows | **Alternative flow 1: No available mock tests.**   1. From step #2 of the basic flow, if there are no available mock tests, the system displays a message indicating that no tests are available. 2. User has the option to create a new mock test if they are a Teacher   **Alternative flow 2: User filters or searches for specific tests.**   1. From step #2 of the basic flow, the user applies filters or uses a search function to find specific mock tests based on criteria such as subject, difficulty level, or test creator. 2. The system displays the filtered or searched results. 3. The user continues with step #3 of the basic flow.   **Alternative flow 3: User chooses to take the test immediately.**   1. From step #4 of the basic flow, the user selects the option to take the test immediately. 2. The use case continues with the "Taking Mock Tests" use case. |
| Pre-conditions | User goes to the homepage at www.bilinguo.com.vn.  User is logged into their account. |
| Post-conditions | The user views the details of the selected mock test.  The user can proceed to take the test or perform other related actions, such as editing the test (if the user is a Teacher) or sharing it with others. |

## Use-case: View Dashboard

| No. | 10 |
| --- | --- |
| Use case Name | Dashboard |
| Brief description | This use case delineates the functionality of the dashboard, offering learners a comprehensive and user-friendly interface with various features and resources to support their language acquisition journey effectively. |
| Actors | Users  Admin |
| Basic Flow | 1. The user logs into the platform and accesses the dashboard. 2. The dashboard provides a personalized overview of the user's language learning progress and activities. 3. The user can customize their dashboard preferences, such as language preferences, display settings, and learning goals. 4. The dashboard may feature announcements, updates, or recommendations tailored to the user's learning journey and interests. |
| Alternative Flows | **Alternative flow 1: User explores recommended resources.**   1. The user encounters difficulties or questions while using the dashboard. |
| Pre-conditions | User goes to homepage at [www.bilinguo.com.vn](http://www.hailua.com.vn) |
| Post-conditions | The user interacts with the dashboard to access a range of language learning features and resources, supporting their language acquisition journey effectively. |

## Use-case: View Menu

| No. | 11 |
| --- | --- |
| Use case Name | View Menu |
| Brief description | This use case outlines the functionality of the menu system, which facilitates navigation and access to various sections and features of the platform. |
| Actors | Admin  Users |
| Basic Flow | 1. Upon accessing the dashboard, the user can access the menu system, typically located at the top or side of the interface. 2. The menu system categorizes and organizes different sections and features of the platform for easy navigation. 3. The user can browse through the menu options to find specific functionalities or resources, such as:  * Learning modules: Interactive lessons, tutorials, and exercises tailored to the user's proficiency level and learning goals. * Vocabulary builder: Tools for expanding vocabulary, such as flashcards, word lists, and vocabulary quizzes. * Practice tests: Mock exams and quizzes to assess the user's language proficiency and track their progress over time. * Progress tracking: Visualizations and statistics displaying the user's learning achievements, including completed lessons, quiz scores, and study time. * Community forums: Discussion boards or chatrooms where users can interact with peers, ask questions, and share tips and resources.  1. Each menu option may lead to a submenu or a dedicated page providing further details and options related to the selected feature. 2. The user can interact with the menu system to switch between different sections of the platform seamlessly. |
| Alternative Flows | **Alternative Flow 1: User access to help resources**   1. The menu provides access to help resources, such as FAQs, tutorials, or customer support channels, to assist the user. |
| Pre-conditions | Admin goes to homepage at [www.bilinguo.com.vn](http://www.hailua.com.vn) |
| Post-conditions | The user utilizes the menu system to navigate and access various sections and features of the platform efficiently. |

## Use-case: Log in

| No. | 12 |
| --- | --- |
| Use case Name | Log in |
| Brief description | This use case describes how users can log in to the platform, either using their Google account or by creating a new account. |
| Actors | Users  Admin |
| Basic Flow | 1. The user navigates to the login page of the platform. 2. The user selects the option to log in. 3. If the user chooses to log in with their Google account:  * The user clicks on the "Login with Google" button. * The system redirects the user to the Google authentication page. * The user enters their Google credentials and grants permission for the platform to access their account information. * Upon successful authentication, the user is logged in to the platform.  1. If the user chooses to create a new account:  * The user clicks on the "Create new account" or "Sign up" button. * The user is prompted to provide necessary information such as name, email address, password, etc. * The user completes the registration process by submitting the required information. * The system verifies the provided information and creates a new account for the user. * Upon successful registration, the user is logged in to the platform. |
| Alternative Flows | **Alternative flow 1: User forgot password.**   1. The user clicks on the "Forgot password?" link. 2. The system prompts the user to enter their email address. 3. The system sends a password reset link to the user's email. 4. The user follows the link to reset their password and regain access to their account.   **Alternative flow 2: User encounters login issues.**   1. The user encounters an error while attempting to log in. 2. The system provides error messages or prompts for troubleshooting steps, such as verifying email/password, checking internet connection, etc. 3. If the issue persists, the user may contact customer support for assistance. |
| Pre-conditions | User goes to homepage at [www.bilinguo.com.vn](http://www.hailua.com.vn) |
| Post-conditions | The user successfully logs in to the platform, gaining access to their personalized account and features. |

## Use-case: Log out

| No. | 13 |
| --- | --- |
| Use case Name | Log out |
| Brief description | This use case outlines the process by which users can log out of the platform, terminating their current session. |
| Actors | Users  Admin |
| Basic Flow | 1. The user navigates to the logout option within the platform. 2. The user selects the option to log out. 3. The system confirms the user's intention to log out. 4. The system terminates the user's current session and logs them out of the platform. 5. The user is redirected to the login page or another appropriate landing page. |
| Alternative Flows | **Alternative flow 1: Automatic logout due to inactivity.**   1. If the user remains inactive for a certain period of time, the system automatically logs them out to enhance security and preserve system resources. 2. The user may be prompted to log back in upon returning to the platform.   **Alternative flow 2: Session timeout.**   1. If the user's session expires due to factors such as session duration limits or server-side configuration, the system automatically logs them out. 2. The user may need to log in again to continue accessing the platform. |
| Pre-conditions | User goes to homepage at [www.bilinguo.com.vn](http://www.hailua.com.vn) |
| Post-conditions | The user's current session is terminated, and they are logged out of the platform. Access to protected resources or functionalities is revoked until the user logs in again. |

## Use-case: View All Accounts

| No. | 14 |
| --- | --- |
| Use case Name | View All Accounts |
| Brief description | This use case describes how an administrator can view a list of all user accounts within the system, including details such as username, role, and status. |
| Actors | Admin |
| Basic Flow | 1. The administrator logs into the system and navigates to the account management section. 2. The system displays a list of all user accounts. 3. The administrator selects an account to view its details. 4. The system displays the details of the selected account, including username, role, status, and other relevant information. |
| Alternative Flows | **Alternative flow 1: No accounts available.**   1. From step #2 of the basic flow, if there are no user accounts, the system displays a message indicating that no accounts are available.   **Alternative flow 2: Administrator filters or searches for specific accounts.**   1. From step #2 of the basic flow, the administrator applies filters or uses a search function to find specific accounts based on criteria such as username, role, or status. 2. The system displays the filtered or searched results. 3. The administrator continues with step #3 of the basic flow.   **Alternative flow 3: Administrator performs actions on the account.**   1. From step #2 of the basic flow, the administrator applies filters or uses a search function to find specific accounts based on criteria such as username, role, or status. 2. The system displays the filtered or searched results. 3. The administrator continues with step #3 of the basic flow. |
| Pre-conditions | The administrator is logged into their account on the system.  The administrator has the necessary permissions to view all user accounts. |
| Post-conditions | The administrator successfully views the details of the selected account.  If applicable, actions performed on the accounts (such as edits or deletions) are reflected in the system. |

## Use-case: Managing User Accounts

| No. | 15 |
| --- | --- |
| Use case Name | Managing User Accounts |
| Brief description | This use case delineates how administrators can manage user accounts within the system and view statistical data related to user activity. |
| Actors | Admin |
| Basic Flow | 1. The administrator accesses the user management. 2. The system presents options for managing user accounts 3. Managing User Accounts:  * The administrator can perform various actions on user accounts, including creating new accounts, updating user information (e.g., name, email address, profile picture), deactivating or suspending accounts, and resetting passwords. * The system provides forms or interfaces for performing these actions, with appropriate validation and error handling mechanisms. |
| Alternative Flows | **Alternative Flow 1: User requests account assistance.**   1. A user contacts the administrator for assistance with their account. 2. The administrator assists the user with account-related tasks, such as account recovery, profile updates, or troubleshooting issues.   **Alternative flow 2: User requests data privacy or deletion.**   1. A user requests access to their personal data or requests the deletion of their account and associated data. 2. The administrator or privileged user follows established protocols and regulations for handling such requests, ensuring compliance with data protection laws and regulations. |
| Pre-conditions | Admin goes to homepage at [www.bilinguo.com.vn](http://www.hailua.com.vn) |
| Post-conditions | The administrator successfully manages user accounts. |

## Use-case: Statistical report

| No. | 16 |
| --- | --- |
| Use case Name | Statistical report |
| Brief description | This use case delineates how administrators can view statistical data related to user activity. |
| Actors | Admin |
| Basic Flow | 1. The administrator selects the option to generate a statistical report from the user management and statistical dashboard. 2. The system presents a form or interface for specifying the parameters of the statistical report, such as the timeframe, demographic filters, and metrics to include. 3. The administrator fills in the required details for the statistical report. 4. The system processes the request and generates the statistical report based on the specified parameters. 5. The administrator reviews the generated report, which includes detailed insights and analysis of user activity and engagement within the system. 6. If necessary, the administrator can further customize or refine the report by adjusting the parameters and regenerating it. 7. The administrator utilizes the statistical report to gain valuable insights into user behavior, identify trends, and make informed decisions for system optimization and strategic planning. 8. After reviewing the statistical report, the administrator may take appropriate actions or initiatives to enhance user experience and engagement within the system. |
| Alternative Flows | **Alternative Flow: Implementing Actions based on Statistical Insights**   1. After reviewing the statistical report, the administrator identifies key insights and trends regarding user behavior and engagement within the system. 2. Based on the analysis, the administrator formulates appropriate actions or initiatives aimed at enhancing user experience and increasing user engagement:  * Improving user support and assistance services to address common issues or concerns. * The administrator collaborates with relevant teams or stakeholders to implement the identified actions effectively. * By continuously refining and optimizing the system based on statistical insights, the administrator aims to create a more engaging and user-friendly environment for users. |
| Pre-conditions | User goes to homepage at [www.bilinguo.com.vn](http://www.hailua.com.vn) |
| Post-conditions | The administrator successfully accesses statistical data related to user activity and engagement within the system. |