



# Capstone Project 1

CMU-SE 450

## User Story

Version 1.1

Date: 28/03/2023

### LinguaSnap for Travelers

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INTERNATIONAL SCHOOL OF DUY TAN UNIVERSITY

## PROJECT INFORMATION

<b>Project acronym</b>	LiS		
<b>Project Title</b>	LinguaSnap for Travelers		
<b>Start Date</b>	25 Feb 2023	<b>End Date</b>	31 May 2023
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## REVISION HISTORY

Version	Date	Comments	Author	Approval
1.0	15/03/2023	Initial Release	All members	
1.1	28/03/2023	Function priorities updated	Dat, Nguyen Thanh	

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# 1. Introduction

In software development, a User Story is one or more sentences that describe the natural language (not the technical language) or the business language of the end user or system user to record. what users need to do or not do their job or duty. User stories are used in methods such as Agile software development as the basis for defining system functions such as business development and to facilitate management of requirements. Help yourself know "who", "what" and "why" in a short, simple request, often limited only by details that can be written on a piece of sticky note or scrap paper. small.

User stories written by business users are the primary way of users because they understand most of the system's processes, workflows and functions so it is working right now. User stories can also be written by Dev to make non-functional requirements (like security, performance, quality, etc.).

## 1.1 Purpose

- Provide a prioritized features list, containing a short description of all functionality desired in the product.
- Lists everything that the product owner and Scrum team feels should be included in the software they are developing.

## 1.2 Scope

- Write all the user's requirements.
- Lists some main functions of the system and acceptance criteria of each function.
- Short description of all the functionality desired in the product.
- Given the priority of each feature and function of the product.

## 1.3 References

No	Source	Note
1	<a href="https://www.visual-paradigm.com/guide/agile-software-development/what-is-user-story/">https://www.visual-paradigm.com/guide/agile-software-development/what-is-user-story/</a>	What is User Story?
2	<a href="https://www.atlassian.com/agile/project-management/user-stories">https://www.atlassian.com/agile/project-management/user-stories</a>	User Stories with Examples and Template

## 2. User Stories

### *Priority and Estimates*

Priorities are set from high (H), medium (M) and low (L):

- Priorities of some user stories can be the same with others.
- If a user story has dependencies, it must have lower priority than its dependencies

## VERSION 1: LinguaSnap

### 2.1 Sprint 1

#### 2.1.1 Login

<p>As a user</p> <p>I want the ability to log in to my account and access the app's features and personalized content. This feature will ensure a secure and personalized experience for returning users.</p>		
<b>Login</b>	<b>Project</b> LinguaSnap	<b>Priority</b> : Medium
<b>Actor:</b> User	<b>Acceptance criteria</b> <ul style="list-style-type: none"><li>- Given that I'm in the app, the app should present a login interface or form where I can enter my registered email address or username and associated password.</li><li>- Given that I provide the required login credentials, the app should validate the entered information, ensuring that the email address or username exists and that the password is correct for the corresponding account.</li><li>- Given that the entered login credentials are valid, the app should grant access to the user account and navigate me to the</li></ul>	
Story: The User wants to log in to the system with their account.		

	<p>app's main interface or the last accessed screen.</p> <ul style="list-style-type: none"> <li>- Given that I have forgotten my password, there should be a visible and easily accessible option, such as "Forgot password," on the login screen that allows me to initiate the password recovery process.</li> <li>- Given that I encounter any errors or issues during the login process, such as incorrect credentials or connectivity problems, the app should provide clear error messages or prompts indicating the necessary corrections or troubleshooting steps to be taken.</li> </ul>
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### 2.1.2 Register

<p>As a new user</p> <p>I want the ability to create a new account and register myself to access the app's features. This feature will allow me to personalize my experience, save preferences, and access additional functionality.</p>		
<b>Register</b>	<b>Project</b> LinguaSnap	<b>Priority</b> : Low
<b>Actor:</b> User	<p><b>Acceptance criteria</b></p> <ul style="list-style-type: none"> <li>- Given that I am a new user, there should be a visible and easily accessible option on the login screen or within the app to initiate the account registration process.</li> <li>- Given that I tap on the "Register" option, the app should present a registration interface or form where I</li> </ul>	
Story: The User wants to register for an account to log into the system		

can enter my personal details, such as name, email address, and desired password.

- Given that I provide the required information, the app should validate the entered data, ensuring that all mandatory fields are completed and that the email address is in a valid format.
- Given that the provided email address is not already associated with an existing account, the app should proceed with the registration process.
- Given that the registration process is initiated, the app should store the provided information securely and create a unique user account associated with the provided email address and password.
- Given that the account registration is successful, the app should display a confirmation message or notification indicating that the registration process is complete.
- Given that I have registered an account, the app should automatically log me in and provide access to the app's features and functionalities associated with my account.
- Given that I encounter any errors or issues during the registration process, such as invalid email format or password requirements not met, the app should provide clear error messages or prompts indicating the necessary corrections to be made.



### 2.1.3 Forgot password

<p>As a user</p> <p>As a user of the translation app, I want the ability to recover or reset my password in case I forget it. This feature will ensure that I can regain access to my account and continue using the app without losing any personal data or settings.</p>		
<b>Forgot password</b>	<b>Project</b> LinguaSnap	<b>Priority</b> : Low
<b>Actor:</b> User	<p style="text-align: center;"><b>Acceptance criteria</b></p> <ul style="list-style-type: none"><li>- Given that I have forgotten my password, there should be a visible and easily accessible option on the login screen or within the app settings to initiate the password recovery process.</li><li>- Given that I tap on the "Forgot password" option, the app should present a password recovery interface or prompt me to enter my registered email address or username associated with my account.</li><li>- Given that I provide my email address or username, the app should validate the entered information and check if it matches any existing user accounts in the system.</li><li>- Given that the provided email address or username is valid, the app should send a password reset link or a temporary password to the associated email address.</li></ul>	
Story: The User wants to reset their password when they forgot it		

	<ul style="list-style-type: none"><li>- Given that I receive the password reset link or temporary password, the app should provide clear instructions on how to proceed with the password recovery process, including any necessary steps or security measures.</li><li>- Given that I click on the password reset link or enter the temporary password, the app should navigate me to a secure password reset interface where I can set a new password for my account.</li><li>- Given that I set a new password, the app should enforce any specified password requirements, such as minimum length, inclusion of uppercase and lowercase letters, numbers, and special characters, to ensure password security.</li><li>- Given that the new password is successfully set, the app should confirm the password reset operation and provide a notification or confirmation message indicating that I can now log in using the new password.</li></ul>
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### 2.1.4 Logout

As a user  I want when I press the logout button I will exit the system		
<b>Logout</b>	<b>Project</b> LinguaSnap	<b>Priority</b> : Low
<b>Actor:</b> User	<b>Acceptance criteria</b> <ul style="list-style-type: none"><li>- Given that I have pressed the logout button, I will exit the system and return to the Login interface.</li><li>- Given that I have successfully logged out, the system will delete the user login session</li><li>- Given that I couldn't log out, the app displays a message when you cannot log out</li></ul>	
Story: The User want when they press the logout button, they will exit the system		

### 2.1.5 Translate text

As a user  I want to translate a text from one language to another, and it will be automatic, or when I need to do it manually.		
<b>Translate Text</b>	<b>Project</b> LinguaSnap	<b>Priority</b> : High
<b>Actor:</b> User	<b>Acceptance criteria</b>	

<p>Story: The User want to translate a text from one language to another manually and automatically.</p>	<ul style="list-style-type: none"> <li>- Given that I have opened the app, I will choose the 'From' language, the 'To' language and then type in the text I want to translate.</li> <li>- Given that the text is typed in and the languages are selected, the app will translate the text automatically or manually by me by pressing a button.</li> </ul>
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### 2.1.6 Text recognition with images

<p>As a user</p> <p>I want to import or take a picture, and I want the app to recognize the texts in the image for me to use for multiple reasons.</p>		
<b>Image to Text</b>	<b>Project</b> LinguaSnap	<b>Priority</b> : High
<b>Actor:</b> User	<p><b>Acceptance criteria</b></p> <ul style="list-style-type: none"> <li>- Given that I have opened the application, I press the camera button, and the app will open another UI with the 'Import' icon and 'Camera' icon.</li> <li>- Given that I have pressed the 'Import' or the 'Camera' button, I will choose between importing the images from my gallery or taking the image with my phone camera.</li> <li>- Given that the image is chosen and cropped ,the app will execute the Text Recognition function and display the text.</li> </ul>	
<p>Story: The User wants to import or take an image from their phone, and then have the app get the texts from the image</p>		

### 2.1.7 Crop image

<p>As a user</p> <p>I want to crop the image I took or imported from the gallery, in order to choose the part I want the app to translate.</p>		
<b>Crop Image</b>	<b>Project</b> LinguaSnap	<b>Priority</b> : High
<b>Actor:</b> User	<b>Acceptance criteria</b> <ul style="list-style-type: none"><li>- Given that I have chosen to import an image, when I select an image from my device's gallery with the crop interface.</li><li>- Given that I have chosen to capture an image using the camera, when I tap on the camera button, the app should open the device's camera interface. And after I took the image, the app will open up the crop interface with the image I took.</li><li>- Given that I have imported or captured an image, when I tap on the search button, the app should initiate the image search process.</li></ul>	
Story: The User wants to crop an Image to choose the text part they want the app to recognize.		

## 2.2 Sprint 2

### 2.2.1 Search image

<p>As a user</p> <p>I want to take an image or import an image to the app, and when I press a button, the app will search the images on Google Images that resemble the image I need the most.</p>		
<b>Search image</b>	<b>Project</b> LinguaSnap	<b>Priority</b> : Medium
<b>Actor:</b> User	<p><b>Acceptance criteria</b></p> <ul style="list-style-type: none"> <li>- Given that I have opened the translation app, when I navigate to the image feature, I should see an option to import or capture an image.</li> <li>- Given that I have chosen to import an image, when I select an image from my device's gallery, the app should display a preview of the selected image.</li> <li>- Given that I have chosen to capture an image using the camera, when I tap on the camera button, the app should open the device's camera interface.</li> <li>- Given that I have imported or captured an image, when I tap on the search button, the app should initiate the image search process.</li> <li>- Given that the image search process is completed, the app will open up a browser chosen by me, and the browser will open Google Images with the images that resemble the image I uploaded.</li> </ul>	
<p>Story: The user wants to search for images on Google Images that resemble the image they took or imported the most.</p>		

### 2.2.2 Show definition

<p>As a user</p> <p>As a user of the translation app, after translating a word or phrase, I want to be able to access its definition. This will enable me to understand the meaning of the translated text in more detail and enhance my comprehension.</p>		
<b>Show definition</b>	<b>Project</b> LinguaSnap	<b>Priority</b> : Medium
<b>Actor:</b> User	<b>Acceptance criteria</b> <ul style="list-style-type: none"><li>- Given that I have completed a translation, if there is a definition for the translated text, the app should fetch the corresponding definition for the translated word or phrase.</li><li>- Given that the app has successfully retrieved the definition, it should display the definition in a clear and easily readable format.</li></ul>	
Story: The User wants to see the definition of the translated text.		

### 2.2.3 Search translated text

<p>As a user</p> <p>As a user of the translation app, I want to be able to search the translated text on Google. This feature will allow me to explore additional information, find related content, or verify the accuracy of the translation.</p>		
<b>Search translated text</b>	<b>Project</b> LinguaSnap	<b>Priority</b> : Low
<b>Actor:</b> User	<b>Acceptance criteria</b> <ul style="list-style-type: none"><li>- Given that I have finished translating a text, when I view the translated text on the screen, there should be an option to search it on Google.</li><li>- Given that I have selected the search option, when I tap on it, the app should initiate a Google search using the translated text as the query.</li><li>- Given that the Google search is initiated, the app should open a web browser, displaying the search results page with relevant search results.</li></ul>	
Story: The User wants to search the translated text on Google.		



## 2.2.4 Translation History

<p>As a user</p> <p>I want to be able to access a dedicated interface that displays my recent translations. This will allow me to quickly refer back to previous translations, review the translated content, and easily reuse or share them as needed.</p>		
<b>Translation History</b>	<b>Project</b> LinguaSnap	<b>Priority</b> : Medium
<b>Actor:</b> User	<p><b>Acceptance criteria</b></p> <ul style="list-style-type: none"> <li>- Given that I have used the translation app, when I navigate to the translation history section, there should be a clear and easily accessible option to access it from the toolbar.</li> <li>- Given that I have accessed the translation history interface, it should display a list or grid layout of my recent translations, organized in reverse chronological order (from most recent to oldest).</li> <li>- Given that the translation history interface is displayed, each translation entry should include relevant information such as the original text, translated text, source language, target language.</li> <li>- Given that the translation history contains a large number of entries, the app should provide a search or filtering functionality to allow me to find specific translations based on</li> </ul>	
<p>Story: The user wants to have an interface dedicated to the recent translations they did with and multiple functions for better selecting.</p>		

	<p>keywords, dates, or other relevant criteria.</p> <ul style="list-style-type: none"> <li>- Given that I have found the desired translation in the history, I should be able to select it to view the full details of the translation, including any additional context or notes that I may have added during the translation process.</li> </ul>
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### 2.2.5 Spell check

<p>As a user</p> <p>I want the app to assist me in correcting grammatically incorrect text by providing alternative suggestions. This feature will help improve the accuracy and readability of my translations.</p>		
<b>Spell check</b>	<b>Project</b> LinguaSnap	<b>Priority</b> : High
<b>Actor:</b> User	<p><b>Acceptance criteria</b></p> <ul style="list-style-type: none"> <li>- Given that I have entered text in the translation input field, when the text contains potential grammatical errors, the app should automatically detect them.</li> <li>- Given that the app has detected potential grammatical errors, it should provide a better text for me to choose</li> </ul>	
Story: The User wants to be provided with a better text if their input text is grammatically incorrect.		

### 2.2.6 Save Used Languages

<p>As a user</p> <p>I want the app to remember and save the From and To languages that I recently used for translations. This will save me time and effort by automatically preselecting the previously chosen languages when I open the app again.</p>		
<b>Save Used Languages</b>	<b>Project</b> LinguaSnap	<b>Priority</b> : Low
<b>Actor:</b> User	<b>Acceptance criteria</b>	
Story: The User wants the app to preselect the languages that they previously used instead of choosing them again.	<ul style="list-style-type: none"><li>- Given that I have chosen a specific From language and To language for translation, when I successfully complete a translation, the app should save these language selections.</li><li>- Given that the language selections are saved, the app should persistently store them so that they are retained even when I close the app or restart my device.</li><li>- Given that I reopen the app after a previous session, the app should retrieve and preselect the previously used From language and To language for translation.</li></ul>	

### 2.2.7 Menu

<p>As a user</p> <p>I want to access a menu that provides multiple options for various app functionalities. This menu will serve as a centralized hub for accessing features such as Translation History, Settings, Security, Bookmarks, and User Information, allowing me to conveniently navigate and manage different aspects of the app.</p>		
<b>Save Used Languages</b>	<b>Project</b> LinguaSnap	<b>Priority</b> : Low
<b>Actor:</b> User	<p style="text-align: center;"><b>Acceptance criteria</b></p> <ul style="list-style-type: none"><li>- Given that I am using the translation app and logged into my account, there should be a visible and easily accessible button or icon that represents the menu.</li><li>- Given that I tap on the menu button, the app should open a side screen or overlay that displays the available menu options.</li><li>- Given that the menu is open, it should provide clear labels or icons for each option, such as Translation History, Settings, Security, Bookmarks, and User Information.</li></ul>	
Story: The User wants a menu that can access all the features of the app.		

### 2.3 Sprint 3

### 2.3.1 Swap languages

<p>As a user</p> <p>I want to be able to quickly swap the From and To languages during the translation process. This feature will allow me to easily switch the source and target languages without manually reselecting them, saving time and effort.</p>		
<b>Swap languages</b>	Project : LinguaSnap	Priority : Medium
Actor : User	<p style="text-align: center;"><b>Acceptance criteria</b></p> <ul style="list-style-type: none"><li>- Given that I am in the translation interface, there should be a visible and easily accessible button or icon that represents the language swap functionality.</li><li>- Given that I tap on the language swap button, the app should interchange the From and To languages, updating the translation input and output accordingly.</li><li>- Given that the language swap occurs, the app should visually indicate the swapped languages to provide clear feedback to the user.</li><li>- Given that I have made previous modifications to the translation text, the app should retain the translated text while swapping the languages, preserving any edits or changes made by the user.</li></ul>	
Story: the user wants to swap the languages they are using for better convenience.		

### 2.3.2 Copy Translation

<p>As a user</p> <p>I want the ability to easily copy the translated text to the clipboard of my phone. This feature will enable me to quickly paste the translated text into other applications or documents without the need for manual typing.</p>		
<b>Copy Translation</b>	Project : LinguaSnap	Priority : Low
Actor : User	<b>Acceptance criteria</b> <ul style="list-style-type: none"><li>- Given that I have completed a translation, there should be a clearly visible and easily accessible option to copy the translated text.</li><li>- Given that I select the copy option, the app should retrieve the translated text and store it in the clipboard of my phone.</li><li>- Given that the translation is successfully copied to the clipboard, the app should provide a visual confirmation or a brief notification to indicate the success of the operation.</li><li>- Given that the translated text contains special characters, formatting, or language-specific characters, the app should handle the encoding or formatting appropriately to ensure accurate copying and pasting.</li></ul>	
Story: The user wants to copy the translated text to the clipboard of their phone.		

### 2.3.3 Bookmark

<p>As a user</p> <p>I want the ability to bookmark specific translations that are important or frequently accessed. This feature will allow me to save and organize translations for later reference, ensuring quick and easy access to valuable information.</p>		
<b>Bookmark</b>	<b>Project</b> LinguaSnap	<b>Priority</b> : Medium
<b>Actor</b> : User	<b>Acceptance criteria</b> <ul style="list-style-type: none"><li>- Given that I am viewing a translated text, there should be a visible and easily accessible option to bookmark the translation.</li><li>- Given that I select the bookmark option, the app should save the translation to the bookmarked items, associating it with relevant metadata such as the original text, translated text, source language, target language, and timestamp.</li><li>- Given that I have bookmarked a translation, the app should provide a visual confirmation or a brief notification to indicate that the bookmark operation was successful.</li><li>- Given that I want to view my bookmarked translations, there should be a dedicated interface or section within the app that displays all the bookmarked items.</li></ul>	
<b>Story:</b> The user wants to bookmark specific translations that they see as important.		

### 2.3.4 View bookmarks

<p>As a user</p> <p>I want a dedicated interface that allows me to view and manage all my bookmarked translations. This interface will provide a comprehensive overview of my bookmarked items, enabling me to easily access, organize, and interact with them.</p>		
<b>View bookmarks</b>	Project: LinguaSnap	Priority : Medium
<b>Actor:</b> User	<b>Acceptance criteria</b> <ul style="list-style-type: none"><li>- Given that I want to access my bookmarked translations, there should be a visible and easily accessible option to navigate to the View Bookmarks interface from the main menu or toolbar.</li><li>- Given that I open the View Bookmarks interface, it should display a list or grid layout of all my bookmarked translations, organized in a user-friendly manner.</li><li>- Given that the View Bookmarks interface is displayed, each bookmarked item should include relevant information such as the original text, translated text, source language, target language.</li><li>- Given that the bookmarked translations list contains a large number of entries, the app should provide a search or filtering functionality to allow me to find specific bookmarks based on keywords, dates, or other relevant criteria.</li><li>- Given that I want to view the details of a bookmarked translation, the app should allow me to select a bookmarked item to</li></ul>	
<b>Story:</b> The user wants to see all the translations they bookmarked with features for better accessing.		



	navigate to the translation screen with the all the bookmarked translation details.
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### 2.3.5 Speech to Text

<p>As a user</p> <p>I want the ability to use speech input to quickly and conveniently generate text in the selected From language. This feature will allow me to speak a phrase or sentence, which will then be converted to text in real-time for translation.</p>		
<b>Speech to Text</b>	<b>Project</b> : LinguaSnap	<b>Priority</b> : Medium
<b>Actor:</b> User	<p style="text-align: center;"><b>Acceptance criteria</b></p> <ul style="list-style-type: none"> <li>- Given that I want to use the Speech to Text feature, there should be a visible and easily accessible option to initiate speech input in the selected From language.</li> <li>- Given that I tap on the speech input button, the app should prompt me to grant permission to access the device's microphone for recording speech.</li> <li>- Given that I grant permission, the app should activate the microphone and display a visual indicator, such as a microphone icon, to indicate that it's ready to receive speech input.</li> <li>- Given that I start speaking in the selected From language, the app should continuously process the speech input and</li> </ul>	
<b>Story:</b> Users wants to record a speech and let the app generate the text.		

	<p>convert it to text in real-time, displaying the transcribed text on the screen.</p> <ul style="list-style-type: none"> <li>- Given that the speech input is being transcribed, the app should provide feedback to indicate the progress of the transcription, such as a spinning icon or a progress bar.</li> <li>- Given that I finish speaking, the app should automatically stop the transcription process and display the final transcribed text.</li> </ul>
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### 2.3.6 Text to Speech

<p>As a user</p> <p>I want the ability to convert translated text into spoken words using the Text to Speech feature. This functionality will enable me to listen to the translated text in the selected target language, enhancing the overall user experience and facilitating comprehension.</p>		
<b>Text to Speech</b>	<b>Project</b> LinguaSnap	<b>Priority</b> : Medium
Actor : User	<p><b>Acceptance criteria</b></p> <ul style="list-style-type: none"> <li>- Given that I want to use the Text to Speech feature, there should be a visible and easily accessible option to initiate the text-to-speech conversion.</li> <li>- Given that I tap on the text-to-speech button, the app should retrieve the translated text and prepare it for audio playback.</li> <li>- Given that the text-to-speech conversion is initiated, the app should provide feedback to</li> </ul>	
Story: The user wants to have the text of their chosen language converted in to spoken words.		

	<p>indicate that the audio generation process has started, such as a loading animation or a play button.</p> <ul style="list-style-type: none"><li>- Given that the audio playback is ready, the app should play the translated text as spoken words in the selected target language using a clear and natural-sounding voice.</li></ul>
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