

NameSayer

User Manual

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Table of Contents

Licenses and Credits	2
Licenses	2
Credits	2
Installation and Startup of NameSayer	3
System Requirements	3
Before Starting	3
How To Start	3
How To Import Names	3
Using NameSayer	4
What is NameSayer?	4
Login	4
User List	4
New User	5
How To Use Login	5
Main Menu	6
Practise Menu	7
How to Input Valid Names into Practise Playlist:	7
Search and Upload Names	7
Practise Names	8
Play Menu	10
Playlist Table	10
Playlist Remote	10
Test Microphone Menu	12
Record New Name Menu	13
How to record a new name?	13
Rewards Menu	14
Ways to earn Points	14
Rewards Tier List	14

Licenses and Credits

Licenses

The following are licenses of external libraries, audio files used and icons or images used in the creation of NameSayer.

1. JFoenix is licensed under Apache 2.0.
2. ControlsFX is licensed under BSD license.
3. The audio files of names in the default database are from Dr. Catherine Watson and are licensed under Intellectual Property Created By Staff and Students policy of the University of Auckland.

Credits

- Music Icons made by Daniele De Santis from:
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- Microphone Icon made by Smashicons from:
[\[https://www.flaticon.com/free-icon/microphone_149427#term=record&page=1&position=1\]](https://www.flaticon.com/free-icon/microphone_149427#term=record&page=1&position=1)
- Star Icon made by Dave Gandy from:
[\[https://www.flaticon.com/free-icon/star_25291#term=star&page=1&position=39\]](https://www.flaticon.com/free-icon/star_25291#term=star&page=1&position=39)
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- Repeat Icon made by Smashicons from:
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- Present Icon made by Freepik from:
[\[https://www.flaticon.com/free-icon/gift_548427#term=present&page=1&position=93\]](https://www.flaticon.com/free-icon/gift_548427#term=present&page=1&position=93)
- Round help Icon made by Freeepik from:
[\[https://www.flaticon.com/free-icon/round-help-button_61671#term=question&page=1&position=72\]](https://www.flaticon.com/free-icon/round-help-button_61671#term=question&page=1&position=72)

Installation and Startup of NameSayer

System Requirements

- Any Linux System (Preferably running on Ubuntu 16.04 above)
- Java 8+ or above (Java 10 not supported)
- Minimum screen resolution - 1000 x 600 and above

Before Starting

NameSayer is only compatible with Linux operating systems. NameSayer also requires Java versions 8+. To install Java, please go to <https://www.java.com/en/download/>. FFmpeg also needs to be installed onto your system. To install FFmpeg, please go to <https://www.ffmpeg.org/download.html/>.

You also require an audio input (e.g. a microphone) and an output device (e.g. headphones) to be able to fully use the features of NameSayer.

How To Start

- (1) Place **Project-NameSayer.jar** into appropriate folder
- (2) Open your Linux terminal
- (3) On command line (cmd), change directory (cd) to appropriate folder where jar file is
- (4) On command line, type **"java -jar Project-NameSayer.jar"**

How To Import Names

- (1) Start up **Project-NameSayer.jar** using the "How To Start" instructions above
- (2) The folder **data/names** must be generated from startup (or already available)
- (3) Place any audio files of a name that is 3-5 seconds, in .wav format into **data/names**.
The naming convention for the .wav file is: **[CREATEDBY_DATE_TIME_NAME].wav**
- (4) Restart or run the **Project-NameSayer.jar** as explained above

NameSayer Folder Structure

When NameSayer is running for the first time, two main folders will be created:

- **data** Folder: Stores database of names (in **names** folder), all usernames created in system (in **usernames** folder), current login user (**CurrentUser.txt**) and current rating of audio names quality (**ratingAudio.txt**). The data folder and current items inside will never be deleted and progress will stay constant.
- **temp** Folder: Stores all temporary recordings and combinations of audio files that were played from the playlist. This folder will always be emptied on startup to NameSayer.

Using NameSayer

What is NameSayer?

NameSayer is an application for users to listen to and practise the names that may be unfamiliar to the user. It is intended to be used by university students, who are practising the names of their fellow peers and lecturers in class. However anyone is free use it!

Login

The login screen is the first menu you will come across when you open the NameSayer program. It is a system that allows for many users to have personalised profiles throughout the use of NameSayer. NameSayer includes personal usernames, progression system for achievements and unlockables and more!

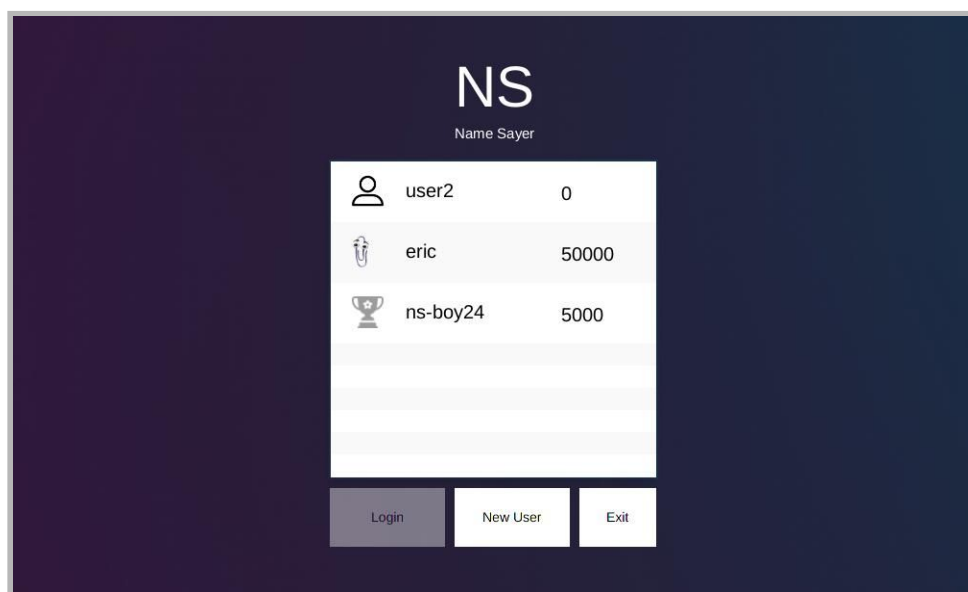


Figure 1. Login page displaying different users and their progression in points

User List

User list contains a list of current users, which will be saved on exit. In *Figure 1*, there are currently 3 users which have different properties:

- (1) **Profile Picture:** On the very right of each username row, an image is displayed and this can be changed throughout a users progression in NameSayer. Different profile pictures can be earned through the effort of earning more points.

- (2) **Username:** Provides a unique identity in which each user has the choice of personally naming their own profile, when they make a new profile in the **NEW USER** button popup.
- (3) **Points:** Points are earned continuously throughout the use of NameSayer. This includes practicing names, recording practiced names and recording new names! Depending on the fidelity of the task, users may earn more points on certain tasks. They are stored within each profile individually and will be saved upon exit. Points contribute to the reward system in NameSayer. For more information on points see the section: **REWARDS MENU**.

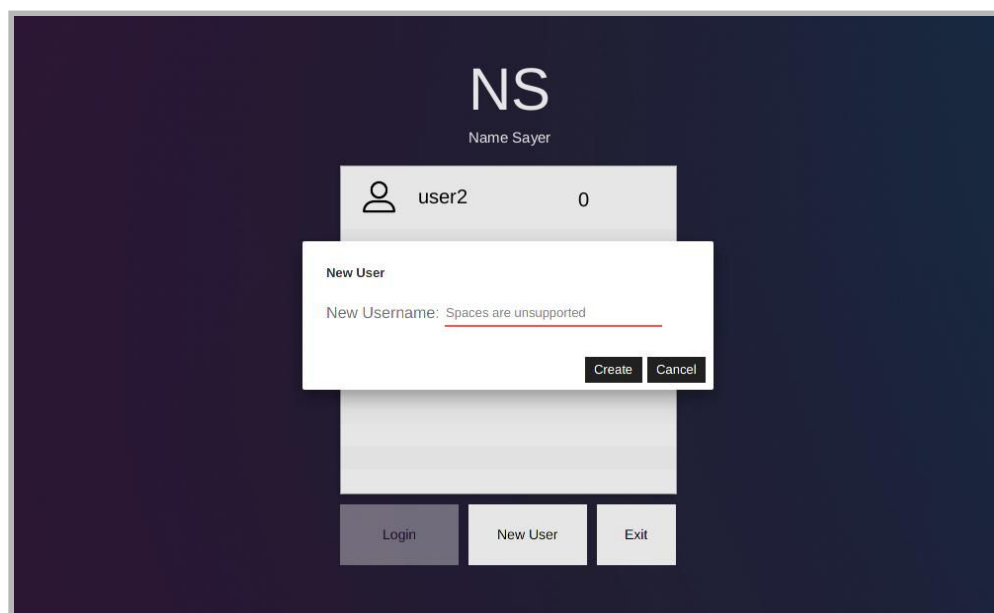


Figure 2. Login page displaying the create a NEW USER feature

New User

New user button displays a popup box which allows a user to create a new profile as shown in Figure 2. When the button is pressed, you are prompted to enter a new username. Only appropriate characters can be entered and the username must not contain spaces and can only have a maximum of 12 characters. If all these requirements are met, you can press the **CREATE** button to confirm the creation.

How To Use Login

- (1) On startup for the first time, there will be no users to select when you first open NameSayer. Clicking the **NEW USER** button will bring up a dialog, where you can type in a username to create a new user (explained above).
- (2) Once you have created a new user, you can now select the user you have created. To do this, **CLICK** on any of the users on the list (it should highlight the user row).
- (3) Then to Login into NameSayer press the **LOGIN** button.
- (4) This opens the **MAIN MENU**.

Main Menu

The main menu provides an overall view of the layout of the NameSayer program. There are a few components which will act your navigation throughout NameSayer and *Figure 3* will provide a taste for what the GUI will look like.

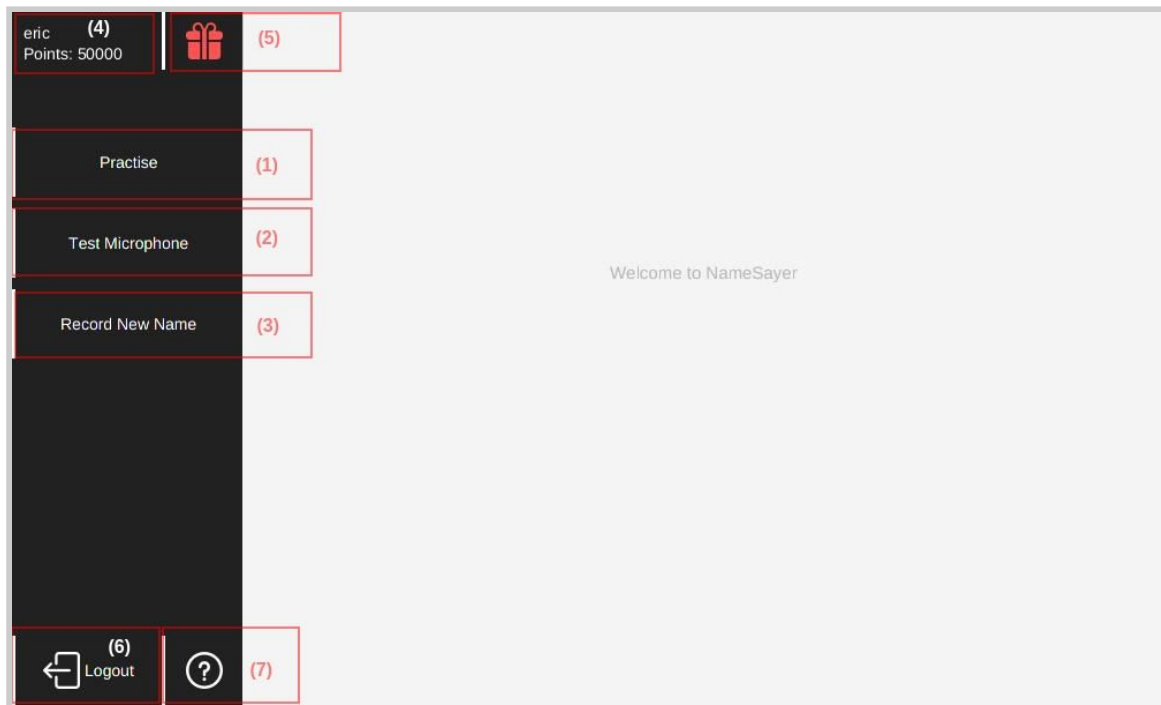


Figure 3. MAIN MENU screen GUI display upon login

The side menu allows for easy navigation between different menu screens. The side menu will always be fixed when navigating throughout NameSayer. Clicking any of these will take you to one of the following menus described below.

The left side menu consists of (left section of *Figure 3*):

- (1) **Practise:** Practise single or multiple names in the current database
- (2) **Test Microphone:** Test your systems microphone and adjust levels accordingly
- (3) **Create New Name:** Record any new name to your liking!
- (4) **Username and Points:** Displays the user logged in and their current progress
- (5) **Rewards:** Look at currently earned rewards and apply a reward
- (6) **Logout:** Logout to go back to the LOGIN MENU
- (7) **Help:** Displays a popup which provides tips and tutorials on how to use NameSayer

Practise Menu

The Practise menu allows you to add names that are available in the database to the playlist. You can only input names that are at most 50 characters long, which includes all spaces and hyphens in between names. You may add single names or multiple names combined into a single full name.

How to Input Valid Names into Practise Playlist:

- To search a full name to add to the playlist, you must type the whole name into the search bar
- To search for a single name to add to the playlist, type the name (partially) into search bar
- To upload a single/full name into playlist, you must enter its whole name for each line
- Practising a full name will be in the format:
[James Biglari] OR [James-Biglari] OR [James-Biglari ... -Ahn]

Search and Upload Names

There are two ways to add names to the playlist:

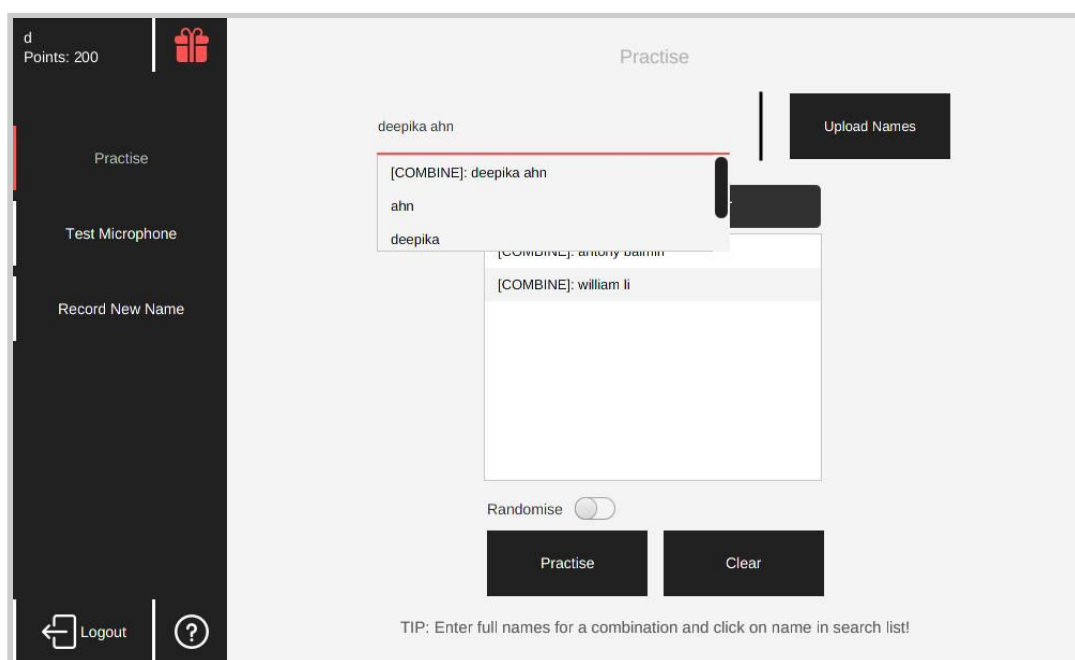


Figure 4. PRACTISE MENU Search functionality example

- **Search name:** Typing in the name(s) will automatically search and display a list of names that closely match the name you have typed in. The names can have alphabets or number characters, as well as spaces (" ") and hyphens (" - "). Search results will display a ([Combine] :) in front of your name to indicate that the name is a combination of smaller names already in the database. In order to select the name **CLICK** on the name within search list shown in Figure 4 above.

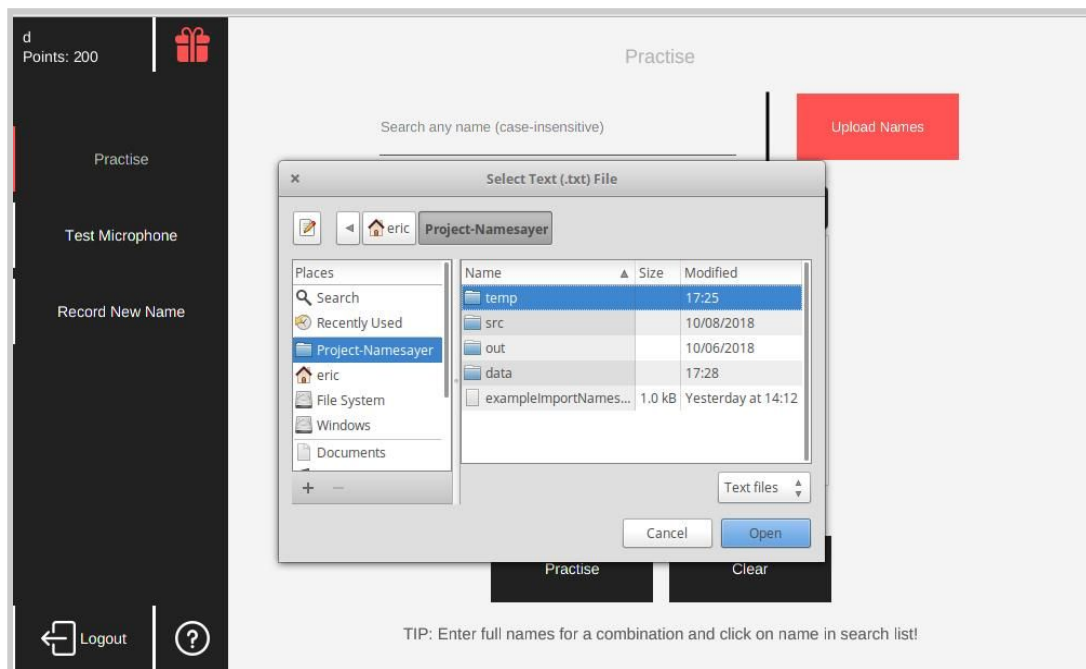


Figure 5. PRACTISE MENU Upload functionality example

- Upload name(s):** You can upload a list of names from a text file (**.txt**) which will quickly populate the playlist. If the names are in the database (click **UPLOAD NAMES** button shown in Figure 5 above). If the names are not in the database, you will get message telling you the name(s) that are not available. Additionally, you can go to the **RECORD NEW NAME** menu to record a new name.

Each new full name must be on a separate line. You are allowed to have spaces and hyphens between each part of the full name. You are also only allowed to have full names up to 50 characters long using the upload feature.

Example of valid formatted names list text file:

```
-----
exampleNamesList.txt
James Biglari
Ahn Ahn
Antony Balmin Jose
-----
```

Practise Names

When you are ready to practise the names with your created playlist, press the **PRACTISE** button shown in Figure 6 below. This will take you to the **PLAY MENU** screen where you may practise all your selected names.

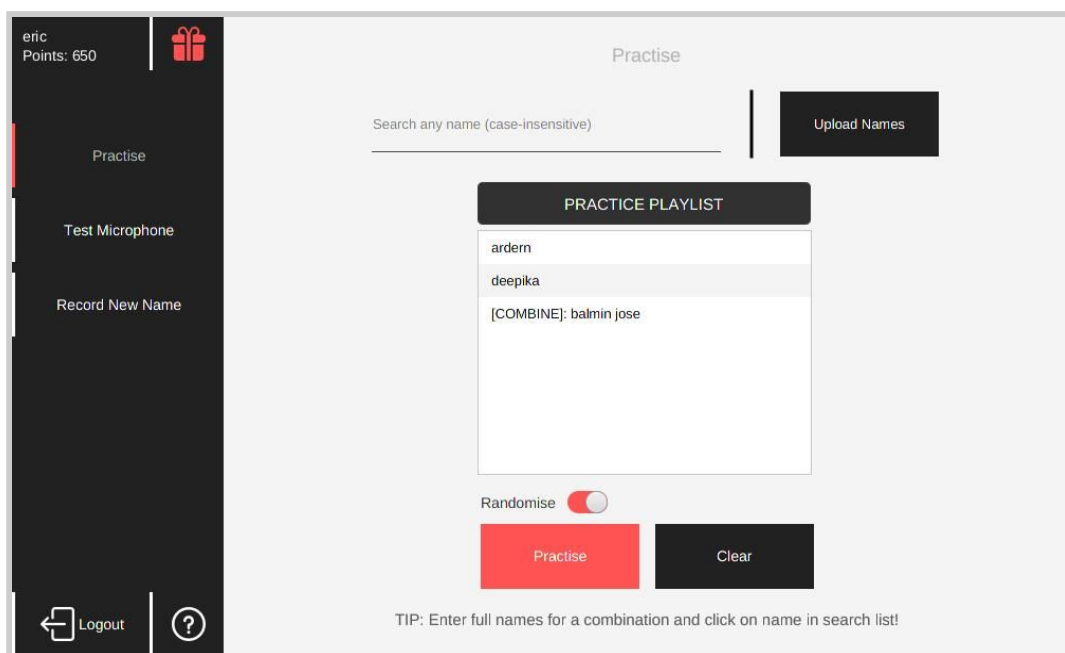


Figure 6. PRACTISE and RANDOMISE example

If you wanted to remake your playlist you may clear the whole playlist by clicking the **CLEAR** button below as shown in Figure 6.

Users current playlist will be automatically arranged alphabetically (a-z). Additionally, you may choose to randomise the ordering of the playlist to test your ability to remember and pronounce names properly. In order to do so, you must have at least two or more names in the playlist and then press the **RANDOMISE** toggle button on (as shown in Figure 6 above).

*NOTE 1: If there are no preset names found or names are not showing up, restart the NameSayer application and/or refer to **How to Import Names** in page 3 of the manual*

*NOTE 2: If there exists audio files with the same name identifier (ie. there are multiple .wav file versions of the name "William"), then the system will randomly pick one of the audio files depending on the current existing rank assigned to that specific audio file. It will initially prefer audio file ranks of **0 OR 3-5 stars**, and if any audio file rank doesn't have such high quality the system will pick between **1-2 stars**. Remember, the ranking system is accessed through the **PLAY MENU** on page 10.*

Play Menu

Once you have successfully selected a list of names to play from the Practise menu, you can now practise each of the names individually through playing the database version of the name, record your own attempt of the name, comparing both database and your recorded versions and saving your own version to the database.

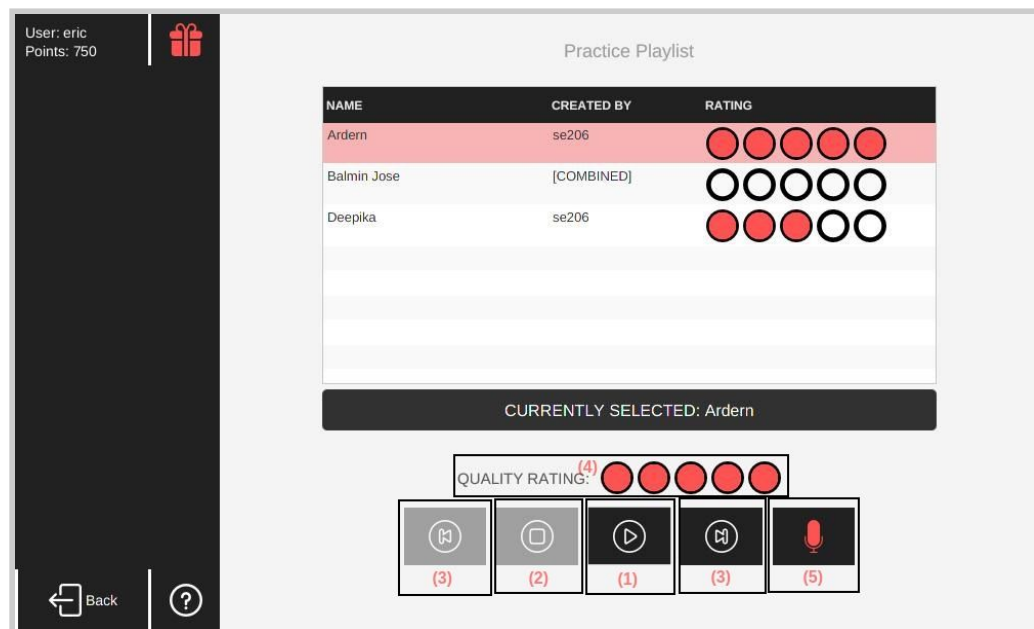


Figure 7. PLAY MENU UI example

Playlist Table

The playlist table shows all of the names you have selected within the playlist and includes information about each of the names including the **[Name]**, **[Created by]** and **[Rating]** (shown in Figure 7 Centre above).

[Name] displays the official names you are practising within the playlist.

[Created by] displays who created the .wav audio file, where for example "[COMBINED]" shows the name that was created through combination of names, "namesayerPro24" shows that it was created through user namesayerPro24.

[Rating] displays the current quality rating of the audio file (visually from 0 to 5) where 0 is unranked and 5 is excellent quality.

Playlist Remote

The playlist remote is the line of buttons shown below the playlist table shown in Figure 7 above which are annotated appropriately for the following. The playlist remote allows for the (1) **Playing**, (2) **Stopping**, (3) **Next & Previous**, (4) **Rating** and (5) **Recording** names:

- (1) **Playing:** Click on the **PLAY** button to play the currently selected name to play its corresponding audio file to listen to the names pronunciation
- (2) **Stopping:** Click on the **STOP** button to stop the currently selected name's current playing session
- (3) **Next & Previous:** Click on the **NEXT** and **PREVIOUS** buttons to navigate between names shown in the table appropriately (where name in top position is end)
- (4) **Rating:** Click on the **RATING** component so you can rate the quality of the audio depending on the name's audio quality and correctness on the pronunciation of the current name. Ranking of a name can affect whether or not the selection of the name will be chosen. The lower the quality of the name the lesser chance the name will be chosen for practise next time and vice versa
- (5) **Recording:** Click on the **RECORD** button to activate the recording popup shown in *Figure 8* below

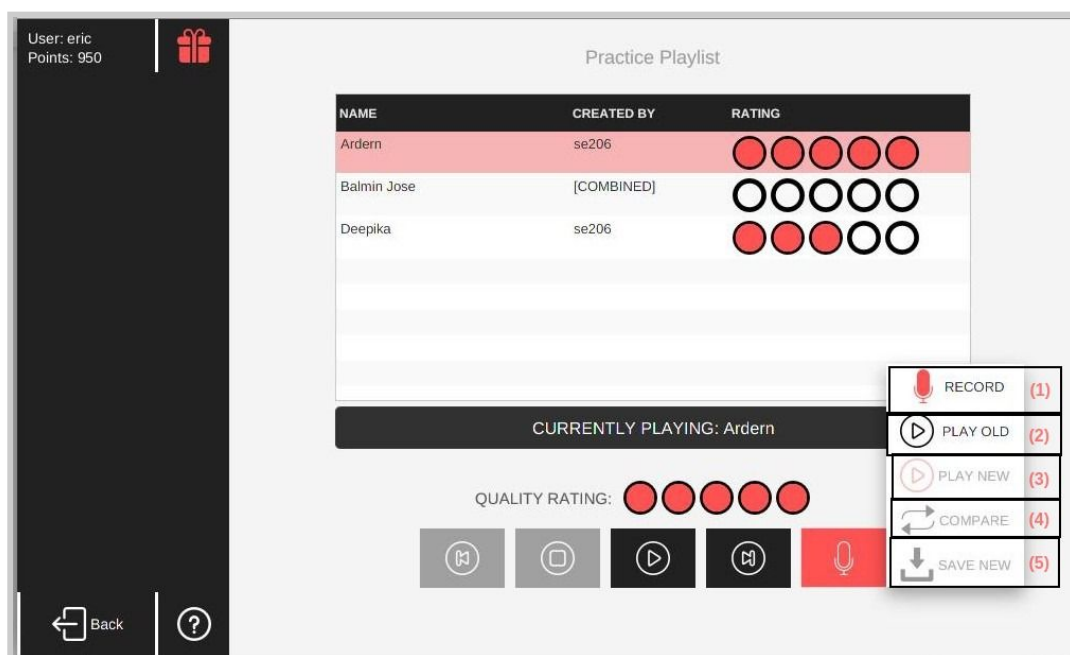


Figure 8. Example of pressing RECORD button

The recording popup contains all the features you need to record your attempt at saying the name you are currently on and being able to compare your recording with the current official recording shown in *Figure 8* above with appropriate annotations. This submenu popup has (1) **Record**, (2) **Play Old**, (3) **Play New**, (4) **Compare** and (5) **Save** buttons:

- (1) **Record:** allows you to record your attempt at saying the current name
- (2) **Play Old:** allows you to play the selected version of the name from the database
- (3) **Play New:** allows you to play your attempt at saying the name
- (4) **Compare:** will Play Old and Play New back to back for easy comparison
- (5) **Save:** allows you to save your attempt. This will put the name into the name database

NOTE 1: You cannot save any recorded "[COMBINED]" names.

NOTE 2: You cannot give a rating to a "[COMBINED]" name.

Test Microphone Menu

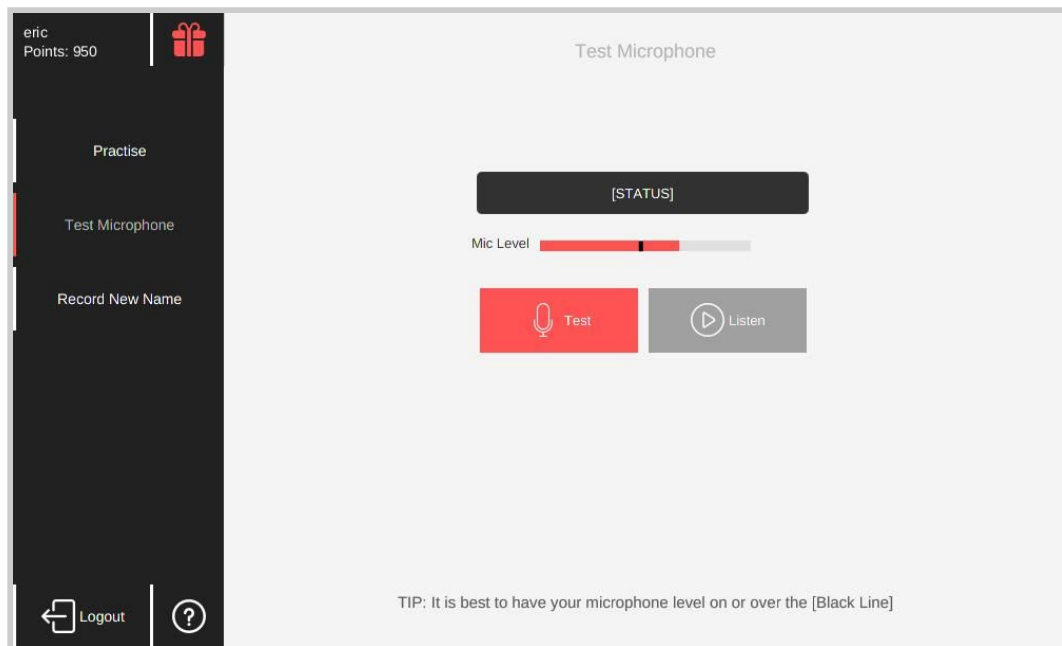


Figure 9. Example of test microphone

The **TEST MICROPHONE MENU** allows you to test the setup of your audio input and output devices (shown in *Figure 9* above). There is a **MIC LEVEL meter** that detects your microphone peak levels dynamically. If the level of your microphone is greater than the black bar, then your audio input is at a good recording level. If the level of your microphone is lower than the black bar, then your audio input needs to be readjusted through your own computer settings preferably.

You can also test your microphone by pressing the **TEST** button, which will record from your audio input device for 5 seconds. After the 5 seconds, you may also listen to the recording by pressing the **LISTEN** button.

*NOTE: If the **MIC LEVEL meter** is empty and/or not moving, it is most likely an external input problem. Additionally, you can test if your microphone works from making a test recording. If all else fails, you may need to configure your system to using a working microphone OR you may need to check if any essential plugins are required as mentioned in **Before Starting** section on Page 3.*

Record New Name Menu

The **RECORD NEW NAME MENU** allows you to add your own recording to the NameSayer database on your machine in a quick and easy way.

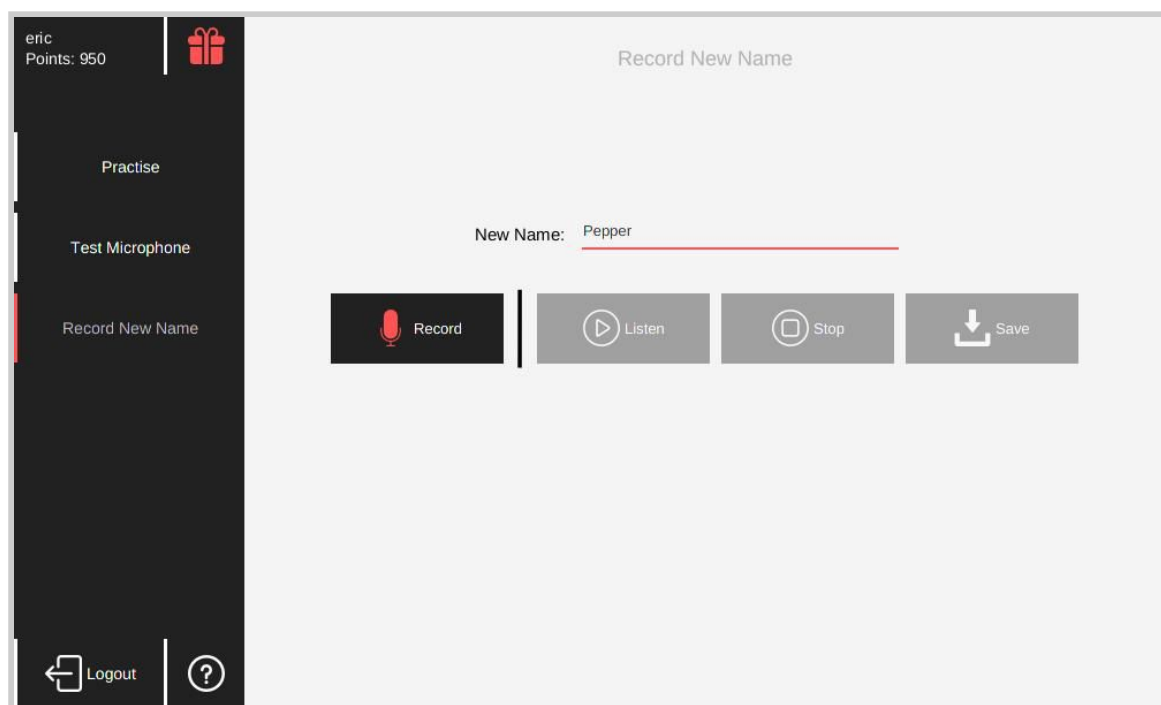


Figure 10. Example of RECORD NEW NAME screen

How to Record a New Name?

- 1) Type in a **single name** that you would like to record and add to the database:
 - Only alphabet and numbers are allowed
 - Spaces (" ") and hyphens ("-") are not supported
 - If the name exists in the database, then you will get a popup telling you the name exists and asks if you want to add another recording to the database
- 2) The program will then **record** you speaking the name that you have typed in the text box for 5 seconds
- 3) Once it has finished recording, you can **listen** to your recording and you have the option to **save** the recording to the database

NOTE: When saving the recorded name, the recording file will go into the database within names folder where you may choose to search the name once created.

Rewards Menu

The **REWARDS MENU** displays all the possible rewards you can have access to (shown in *Figure 11 below*). It contains a list displaying all of the rewards you may earn and how many points are required to achieve the reward. Rewards can also have additional special applications, like changing your Profile Picture or changing the UI with specialised icons.

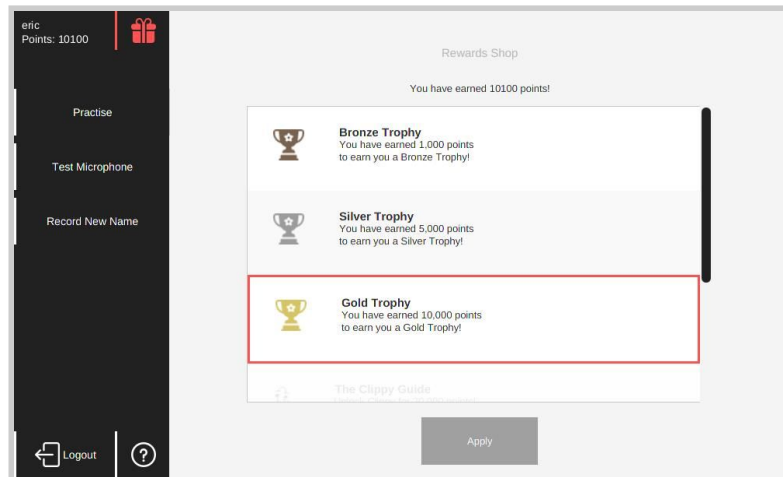
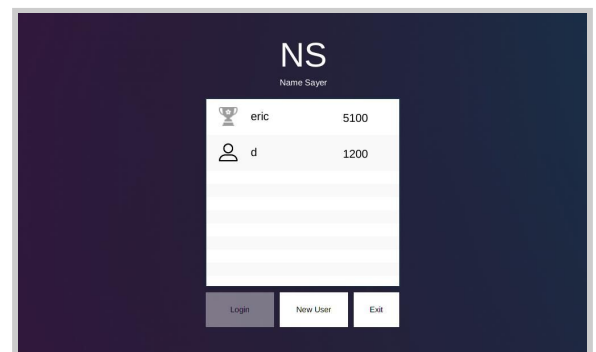


Figure 11. REWARDS MENU achievements example with Gold Trophy applied

The list will show what current rewards a user has earned and what other rewards they still need to earn. The reward will be applied when you press the APPLY button and you can see the effect of your reward on the login menu, next to your username!

Figure 12. Right hand side: Example of bonus profile picture change when user presses APPLY button - user 'eric' has unlocked the Silver Trophy to achieve this.



Ways to Earn Points

- Practising names
- Practising full names
- Saving names (saving a new name or a name already in the database)
- Comparing a name in the database to your recorded attempt of a name

Rewards Tier List

- To unlock the **BRONZE TROPHY**, you need 1000 points minimum
- To unlock the **SILVER TROPHY** you need 5000 points minimum
- To unlock the **GOLD TROPHY**, you need 10000 points minimum
- To unlock **CLIPPY**, you need 20000 points minimum
- To unlock the **PLATINUM TROPHY**, you need 100000 points minimum