Tātai - User Manual

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First Time Launch

Welcome to Tātai! Tātai provides you to test your pronunciation of maori numbers to the apex. Please be aware that Tātai is only compatible with linux and unix operating systems and also requires a recording devices. Tātai uses a JavaFx library and is required to function.

You can install this free library by typing in the following command into your terminal:

sudo apt-get install openjfx

Upon first launch, the Tātai application will create a scores text file and a custom_questionaires folder in your home directory, the custom_questionaries folder contains text files for each custom questionnaire.

Our application is designed for adults to practice their Maori pronunciation on . We aimed to give the user interface a pristine, clean look in order to give a more serious vibe to the user experience.

Play



Figure 1: login screen

When you first launch the application, you will be prompted to enter a username for the session (see Fig 1). This is the name that your scores will be recorded under. If you wish to change your username, simply log out and enter a different username.

Main Menu



There are two different game modes you can choose from: numbers and equations.

Numbers

This game mode tests you purely on your ability to read numbers. You are given numbers to read and translate into Maori before saying the answer out loud. There are three levels in this mode: easy, hard and custom.

The easy level tests you on numbers from 1 to 9.

The hard level tests you on numbers from 1 to 99.

The custom level allows you to enter any number from 1 to 99 and practice it.

Equations

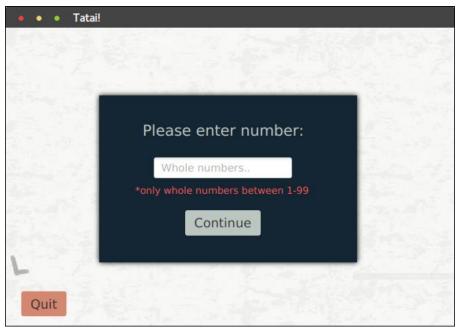
This game mode is similar to the numbers game mode except you are given equations instead of numbers. You must work out the answer to the equation first before saying the answer out loud in Maori. Like the numbers mode, there are three levels: easy, hard and custom.

The easy level tests you on simple maths equations using randomly generated numbers between 1 and 9. In this level, only one random operand is generated and used.

The hard level tests you on harder maths equations which use numbers from 1 to 99. Up to three operands could be generated in this level, along with brackets which make this level significantly more difficult.

The custom level allows you to make questionnaires consisting of equations that you make.

Custom Numbers

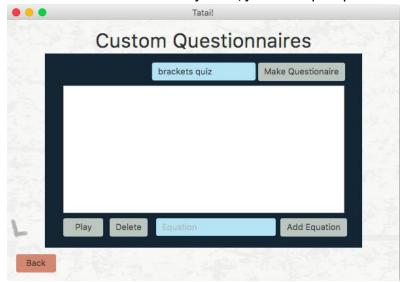


The practice numbers allows you to test your pronunciation ability for any number between 1-99. Simply input a number and press continue. Because this is a practice module, after you submit an answer, it automatically shows your result and brings you back to this scene to practice another number.

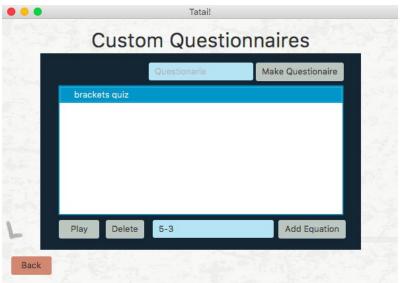
Custom Questionnaires

The Custom Questionnaires game mode allows you to make your own personal set of equations to test yourself.

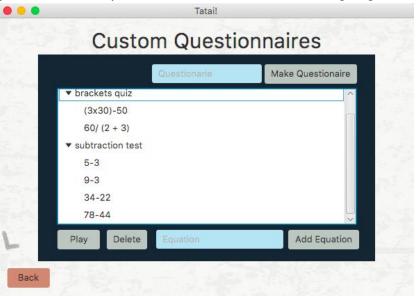
1. To make a new questionnaire, enter a name for the questionnaire into the questionnaire textbox and press the "Make Questionnaire" button. If the name is already taken, you will be prompted to enter another name.



2. To add an equation, first select a questionnaire, enter a valid equation into the equation textbox and press the "Add Equation" button. This will add a new equation into the list of questions contained in the selected questionnaire. In order for the equation to be valid, the solution to the equation must be between 1~99 inclusive. The triangle symbol which appears next to the questionnaire name indicates that there are equations saved in that particular questionnaire.



- 3. You can add as many questionnaires containing as many questions as you please, as long as the names of the questionnaires and the equations in the questionnaires are unique.
- 4. View all of the equations saved in each questionnaire by pressing the triangle symbol. A list of all the saved equations will drop down and each equation can be selected. Press the triangle again to hide the list of equations.



- 5. To delete an equation or questionnaire, select the item you want deleted and press "Delete".
- 6. To play a questionnaire, select a questionnaire and press "Play". This will test you on every single question in the list and give you a score. The results from custom questionnaires will not be recorded in history.

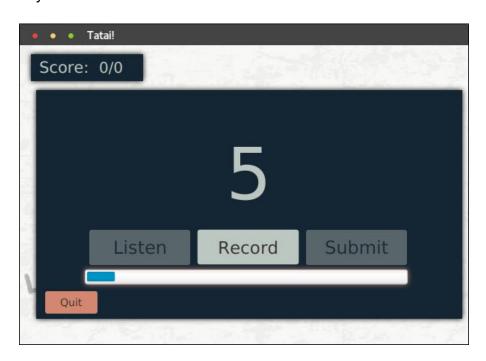
Recording



Figure 2:Recording screen

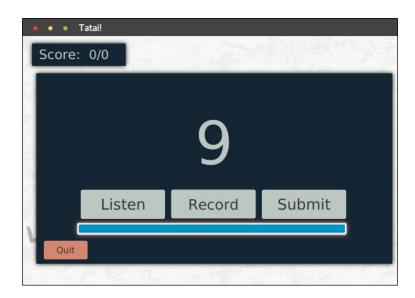
1.After choosing the relevant game mode and difficulty, you will be presented with this scene. Both the Listen and Submit button are disabled at the start before you record your voice.

2.To record simply press the record button make sure you speak clearly and with volume into the microphone. You will be given 3 seconds to record your voice.



When recording, the progress bar indicates how much time is left in the recording.

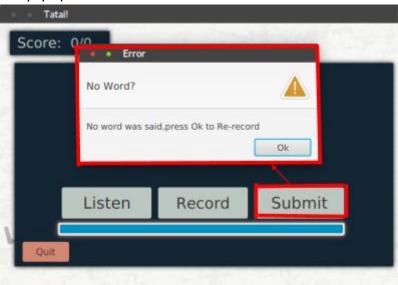
Listening



After recording the listen and submit buttons will be enabled. To listen to your recording simply press the listen button. The progress bar will again load, indicating that the application is playing back your voice recording.

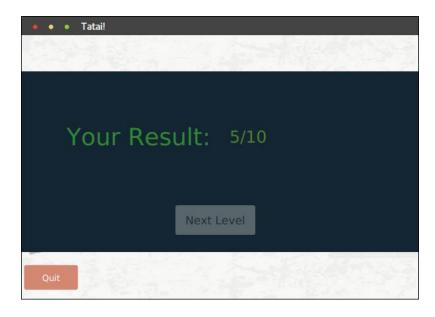
Submit

To submit your answer simply press the submit button(refer to figure 2). If you voice does not get detected for some reason, the following error will pop up.



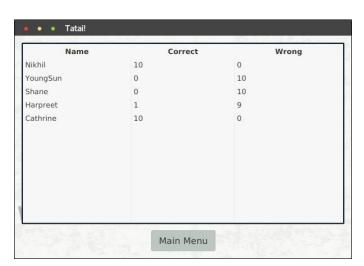
To fix the following error simply close the error dialog and re-record. This will not count as a wrong answer. If this error is persistent, check your input volume level for your mic or consider changing your microphone.

Result



After playing through all the easy or hard mode questions for either equations or numbers, a result screen appears which shows you your overall score. If you were playing on an easy level and you achieve a score of 8/10 or over, you will be given the opportunity to try out the next level by clicking "Next Level".

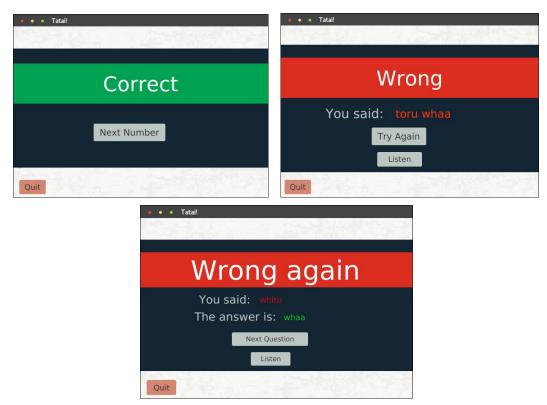
Scores



You can access the scores/leaderboards from the main menu screen the leaderboards show all of the scores for every user, you can arrange the scores but the amount of questions they got correct or wrong by press the respective column headers.

Feedback

There are three different types of feedback screens for a question as shown below:



In both the "Wrong" and "Wrong Again" feedback screens, it will show you what our speech recognition thinks you pronounced. In the "Wrong Again" feed-back screen, it will show you what the correct word is. Furthermore, in both the "Wrong" and "Wrong Again" scenes, you can listen to your recording in order to understand or figure out where you may have missed pronounced the Maori word by pressing the listen button.