# Ninja Typers Web Application

# User Manual


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## Introduction

The purpose of this document is to provide a person with the correct steps on how to use this application properly. It will cover each user in detail and highlight each area of functionality that the user had access to and also provide an image of the current activity to highlight what the user will see on that page.

## Project Description

The project that has been created is a fully automated version of a manual touch typing system that is in place at the Ninja Typers Academy. Ninja Typers is a touch typing club located in Carlow, Dublin and Kildare. The aim of this project is to provide a child with a interactive touch typing environment where they can improve their typing skills by advancing through a course of structured lessons that increase in difficulty by incorporating more keys into the lesson and increase the length of the lesson as the child advances. The application has a lot of added features that will be talked about in more detail in this document. The application is a web based tool that has been implemented using the following technologies Python, Flask, JavaScript, MySQL, jQuery, AJAX, CSS and HTML5..

## Web Access

To access the tool online visit the URL: www.ninjatypersapplication.com. This presents the user with the home page of the application where they can sign in.

## Local Access

To access the tool on the local machine visit the URL: http://0.0.0.0:5000/ . Accessing the tool on the local machine does require the user to have Python as well as all the packages used in the project installed. Python comes pre-installed on MAC OSX and on most Linux distributions. If the machine is running a Windows operating system it has to be manually installed.

Steps for Windows installation of Python:

- To download Python for Windows visit the download page https://www.python.org/downloads/windows/ on Pythons official web site.
- Download the version of Python you want.
- To install it just double click the file.
- Add Python installation Scripts folder to PATH environment variable. The location of the environment variable is Computer->Properties->Advanced System Settings (“Advanced” in XP) ->Environment Variables->System Variables->Path.
- Add to path i.e. C:\Python3\;C\Python3\Scripts
- To install setuptools for Windows run the script ez_setup.py located here https://bitbucket.org/pypa/setuptools/raw/bootstrap/ez_setup.py
- To install pip run the script get-pip.py located here https://raw.github.com/pypa/pip/master/contrib/get-pip.py

There are also a number of external packages that need to be installed for some areas of functionality of the project. These packages can be installed using pip or easy_install commands from the command line utility.

Easy_install and pip installation steps:

- Download distribute_setup.py
- Run distribute_setup.py
- Add Python installation Scripts folder to PATH environment variable. The location of the environment variable is Computer->Properties->Advanced System Settings ("Advanced" in XP)->Environment Variables->System Variables->Path.
- Add path of Python Scripts folder i.e. C\Python3\Scripts (This will include easy_install)
- To install pip use the command easy_install pip.

Example of pip command is *"pip install package_name"* and example of easy_install command is *"easy_install package_name".*

Required Packages:

- Flask [i]
- MySQL[ii]
- Random
- Reportlab[iii]
- Smtplib[iv]
- Time
- Functools

To set up the database open up the command line and change to a MySQL console.
Enter source followed by the path of the project_schema.sql file. This will build the database and add sample data to it.
Finally to run the project: use the command line to change into the project directory and use the command *"python3 appplication.py".*

## Users

There are a number of 5 different types of users that can use this tool.

### 1. Administrator

The administrator is responsible for allowing people to use the tool. The administrator is responsible for activating the accounts of newly created users. An administrator can also de-activate the accounts of any account registered to use the system.

### 2. Teacher (Supervisor)

The teacher is responsible for all students that are enrolled on their current course. The teacher must make payments and print certificates for students as well as overseeing their activity while using the tool. The teacher can perform a number of different operations whilst using the tool.

3. **Multi User (Student)**

   The multi user only has the ability to take lessons on while using the tool. All operations regarding the account of a multi-user must be performed by the teacher of the multi-user.

4. **Single User**

   The single user has a lot more privileges than the multi user. The single user has is responsible for payments and downloading certificates. The lessons of the single-user are embedded in the tool and cannot be altered.

5. **New User**

   The new user has is somebody who wants to use the tool and registers an account to be activated by the administrator.

## User Operations

### 1. Admin

- ***Login***

Web URL: http://www.ninjatypersapplication.com/
Local URL: http://0.0.0.0:5000/

To login, enter username and password in the login area of the main page. Once details are entered press the “Login” button.

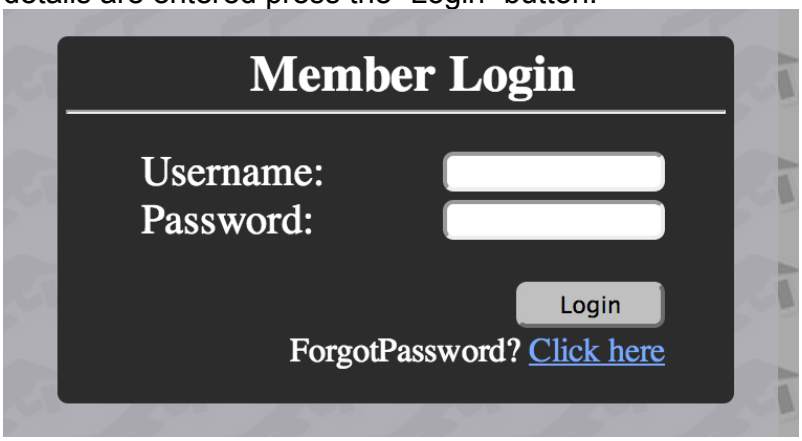


Figure 1 Screen shot of login

- ***Activate Accounts***

Web URL: http://www.ninjatypersapplication.com/activate_users
Local URL: http://0.0.0.0:5000/activate_users

If the admin user has logged in they will automatically be on the page to activate users. To activate uses check the checkbox beside the username in the table. Then press the activate button.

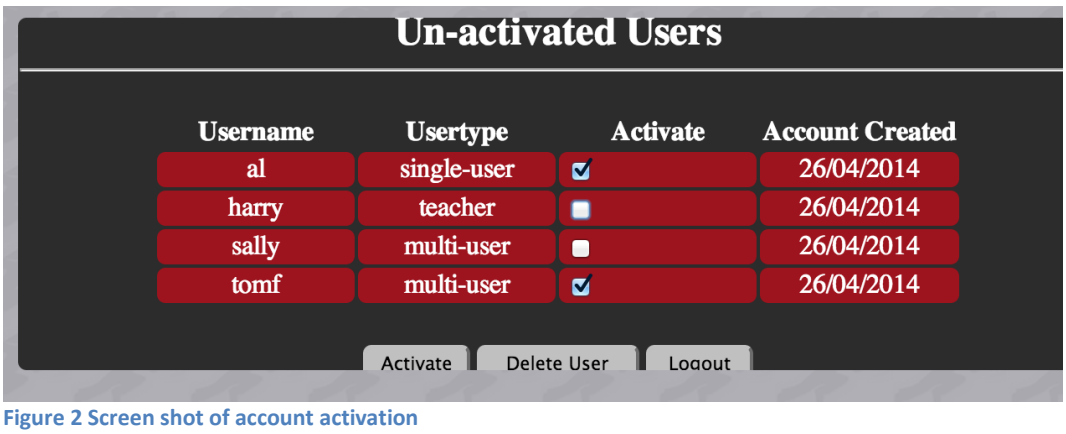


Figure 2 Screen shot of account activation

- ***Logout***

To logout, click the “Logout” button on the current page.

## 2. Teacher

- ***Login***

Web URL: http://www.ninjatypersapplication.com/
Local URL: http://0.0.0.0:5000/

To login, enter username and password in the login area of the main page. Once details are entered press the “Login” button.

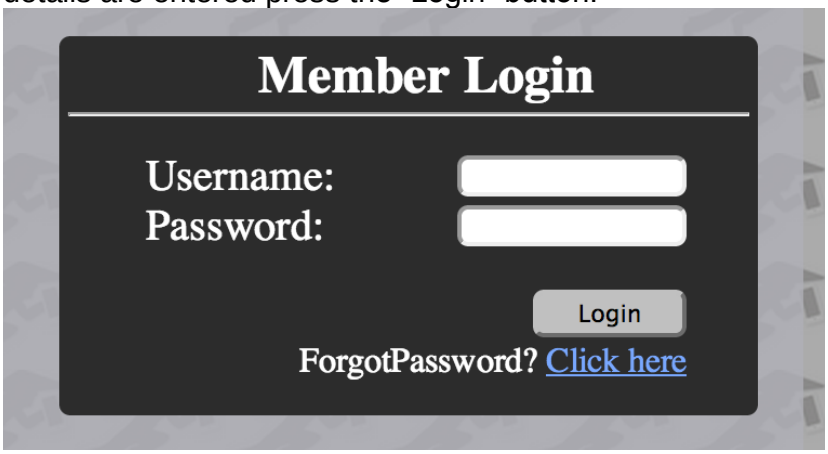


Figure 3 Screen shot of login

- ***Logout***

To logout, click the “Logout” button on the current page.

- ***Add Student***

Web URL: http://www.ninjatypersapplication.com/ register_multiuser
Local URL: http://0.0.0.0:5000/register_multiuser

To add a student to a current course, click the “Add Student” button on the main teacher page. This will redirect the user to a new page. Enter the details of the student in the fields provided. Check the checkbox stating that the user has read the terms of use for the student. To complete the action: click on the “Create” button.

Figure 4 Screen shot of student registration

- ***Delete Student***

Web URL: http://www.ninjatypersapplication.com/accounts
Local URL: http://0.0.0.0:5000/accounts

To delete a student from the current course, click on the “Delete Student” button. This will redirect the current user to a paged with the current students enrolled listed in a table. Enter the name of the student who will be deleted in the text area and then click the “Delete” button.

- ***Create Lesson***

Web URL: http://www.ninjatypersapplication.com/create_lesson
Local URL: http://0.0.0.0:5000/create_lesson

Click the “Create” button to create a new lesson. This will redirect the user to the create lesson page. Enter the lesson name into the textbox. Select the grade for the lesson from the dropdown menu. Enter the content for the lesson in large text area on the page. Finally to create the lesson, click on the “Create” button.

Figure 5 Screen shot of new lesson creation

- ***Make Lesson Current Lesson***

Web URL: http://www.ninjatypersapplication.com/change_lesson
Local URL: http://0.0.0.0:5000/change_lesson

To select a lesson to be used as the current lesson click the “Current Lesson” button on the main teacher page. Enter the lesson name into the Lesson Name textbox. Select the lesson grade from the dropdown menu. Click on the “Change” button to change the lesson to the new primary lesson for that grade.

- ***Download Certificates***

Web URL: http://www.ninjatypersapplication.com/downloads
Local URL: http://0.0.0.0:5000/downloads

To download the certificates available to students enrolled on the course click the “Download Certs” button on the main teacher page. This will redirect the user to the download page. Click on the “here” link associated with the student on the page. This will automatically download the PDF certificate.

Figure 6 Screen shot of all student certificates available for download

- ***Make Payments***

Web URL: http://www.ninjatypersapplication.com/ successful_payment
Local URL: http://0.0.0.0:5000/successful_payment

To make payment for students enrolled on the course select the number of students from the “Payments” dropdown menu. Click the pay now button which redirects the user to the PayPal checkout page. Sign into PayPal to finalise the payment. The user is then redirected to the multiple payments page.
Select the students that the payment covered by checking the checkbox associated with the student. To update the students accounts click the “Update” button. The user will be redirected to the main teacher page.

Figure 7 Screen shot of payment for multiple students

- ***Demo***

Web URL: http://www.ninjatypersapplication.com/ typing_lesson
Local URL: http://0.0.0.0:5000/typing_lesson

To demo a typing activity click the “Demo” button on the main teacher page. The user is then redirected to the typing page. To complete the lesson type the content of the lesson that is displayed on the screen. When the lesson is complete: click the “Finish” button. The user is redirected to the “Lesson Summary” page. To return to the main teacher page click “Home” button.

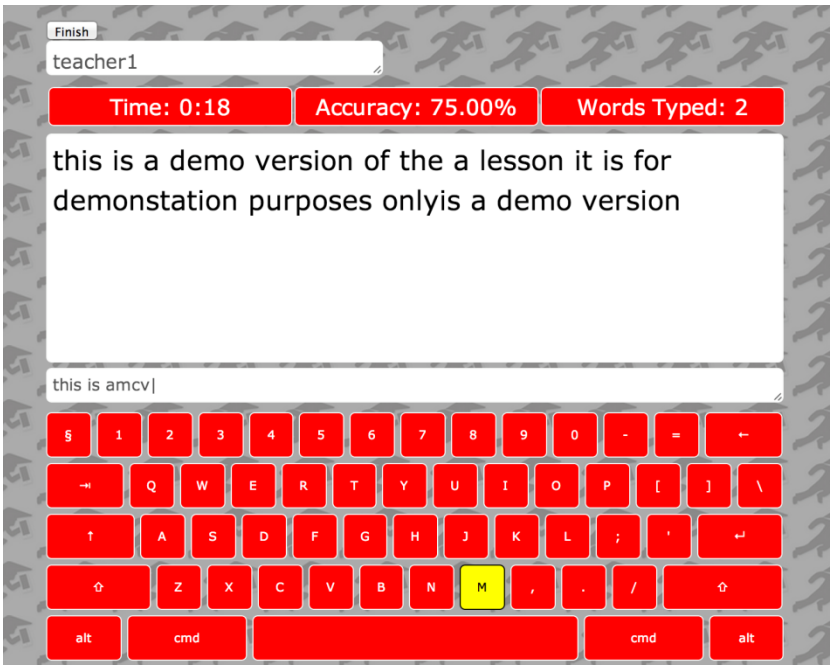

Figure 8 Screen shot of a typing lesson demo

- ***Request Password***

Web URL: http://www.ninjatypersapplication.com/send_email
Local URL: http://0.0.0.0:5000/send_email

If a user cannot remember their password, click on the link in the login area of the main page. This will redirect the user to a page will prompt the user to enter their

username and the type of user they are.  Their password will be emailed to the email address registered with their account.

Figure 9 Screen shot of password request

- ***Change Password***

Web URL: http://www.ninjatypersapplication.com/ change_password
Local URL: http://0.0.0.0:5000/change_password

This option is available only to teachers and single-users although a teacher can change the password of a student enrolled on their course. To change a password: click on the change password button. This will redirect the user to the change password page. Enter in the details of the user whose password will be changed. In order to be successful the user must provide two new matching passwords.

Figure 10 Screen shot of password change option

## 3. Single User

- ***Login***

Web URL: http://www.ninjatypersapplication.com/
Local URL: http://0.0.0.0:5000/

To login, enter username and password in the login area of the main page. Once details are entered press the “Login” button.

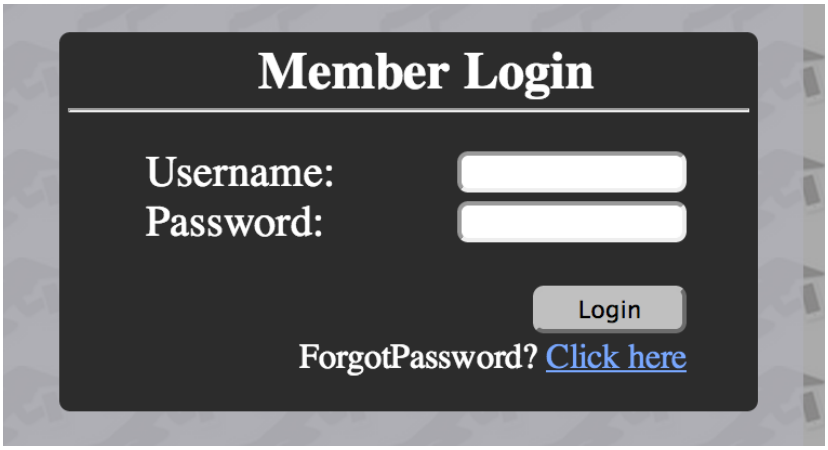


Figure 11 Screen shot of login

- ***Logout***

To logout, click the “Logout” button on the current page.

- ***Take Lesson***

Web URL: http://www.ninjatypersapplication.com/ typing_lesson
Local URL: http://0.0.0.0:5000/typing_lesson

To take a lesson: click “Lesson” button on main single-user page. To complete the lesson type the content of the lesson that is displayed on the screen. The next key to type will be highlighted in yellow. When the lesson is complete: click the “Finish” button. The user is redirected to the “Lesson Summary” page. To return to the main single-user page click the “Home” button.

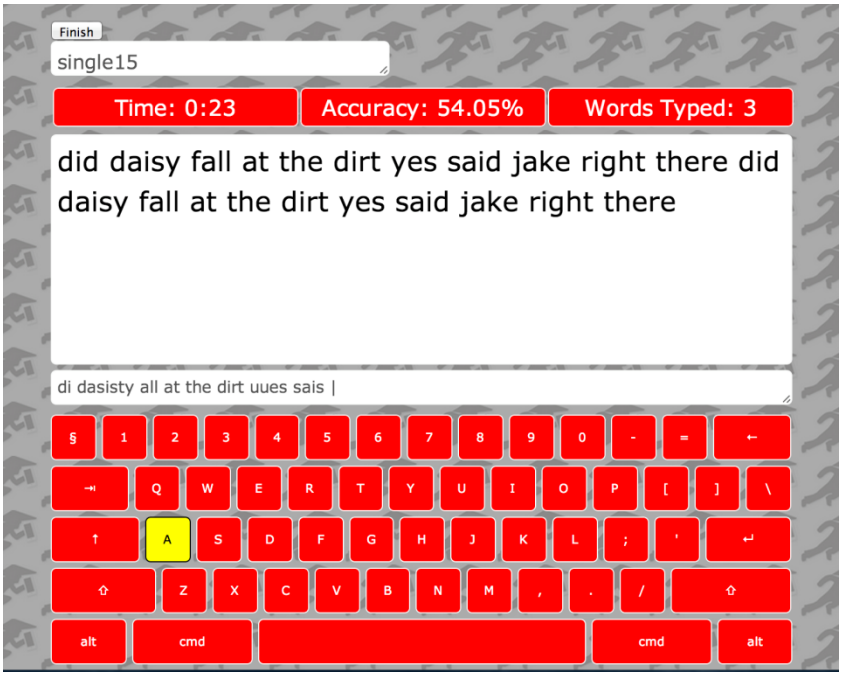


Figure 12 Screen shot of typing activity for single user

- ***Make Payment***

Web URL: http://www.ninjatypersapplication.com/ successful_payment
Local URL: http://0.0.0.0:5000/successful_payment

To make a payment click the “Pay Now” button. This will redirect the user to the PayPal checkout page. To complete payment: sign into PayPal. When payment is complete the user is redirected to the main single user page.

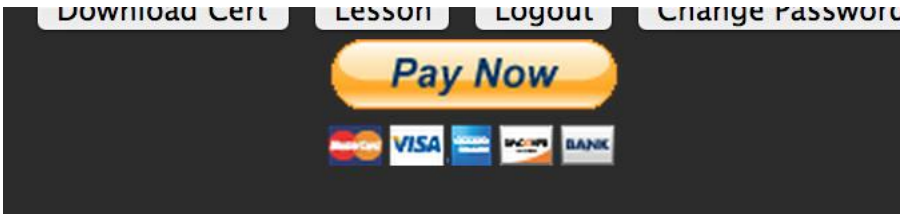


Figure 13 Screen shot of payment option for a single user

- ***Change Password***

Web URL: http://www.ninjatypersapplication.com/ change_password
Local URL: http://0.0.0.0:5000/change_password

To change password click the “Password” button on the main single-user page. This will redirect the user to the “Change Password” page. Enter username in the username textbox. Select user type from the dropdown menu. Enter the old password in the old password textbox. Enter new password in the new password textbox. Enter the new password again in the new password textbox. Click the “Change” button to complete the action.

Figure 14 Screen shot of password change option

- ***Download Certificate***

Web URL: http://www.ninjatypersapplication.com/downloads
Local URL: http://0.0.0.0:5000/downloads

To download the current certificate available for a single-user click on the "Download" button. This will redirect the user to the "Download Certs" page. To download the certificate: click on the "here" link on the page to start the download.

Figure 15 Screen shot of available certificate for a single user

- ***Request Password***

Web URL: http://www.ninjatypersapplication.com/send_email
Local URL: http://0.0.0.0:5000/send_email

If a user cannot remember their password, click on the link in the login area of the main page. This will redirect the user to a page will prompt the user to enter their username and the type of user they are. Their password will be emailed to the email address registered with their account.

Figure 16 Screen shot of password change option

## 4. Multi-User

- ***Login***

Web URL: http://www.ninjatypersapplication.com/
Local URL: http://0.0.0.0:5000/

To login, enter username and password in the login area of the main page. Once details are entered press the “Login” button.

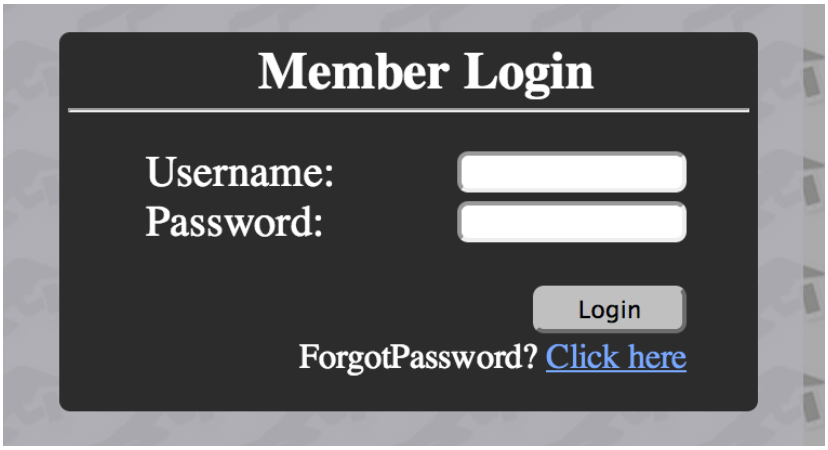

Figure 17 Screen shot of login

- ***Logout***

To logout, click the “Logout” button on the current page.

- ***Take Lesson***

Web URL: http://www.ninjatypersapplication.com/ typing_lesson
Local URL: http://0.0.0.0:5000/typing_lesson

To take a lesson click the “Lesson” button on main single user page. To complete the lesson type the content of the lesson that is displayed on the screen. The next key to type will be highlighted in yellow. When the lesson is complete: click on the “Finish” button. The user is redirected to the “Lesson Summary” page. To return to the main single-user page click the “Home” button.

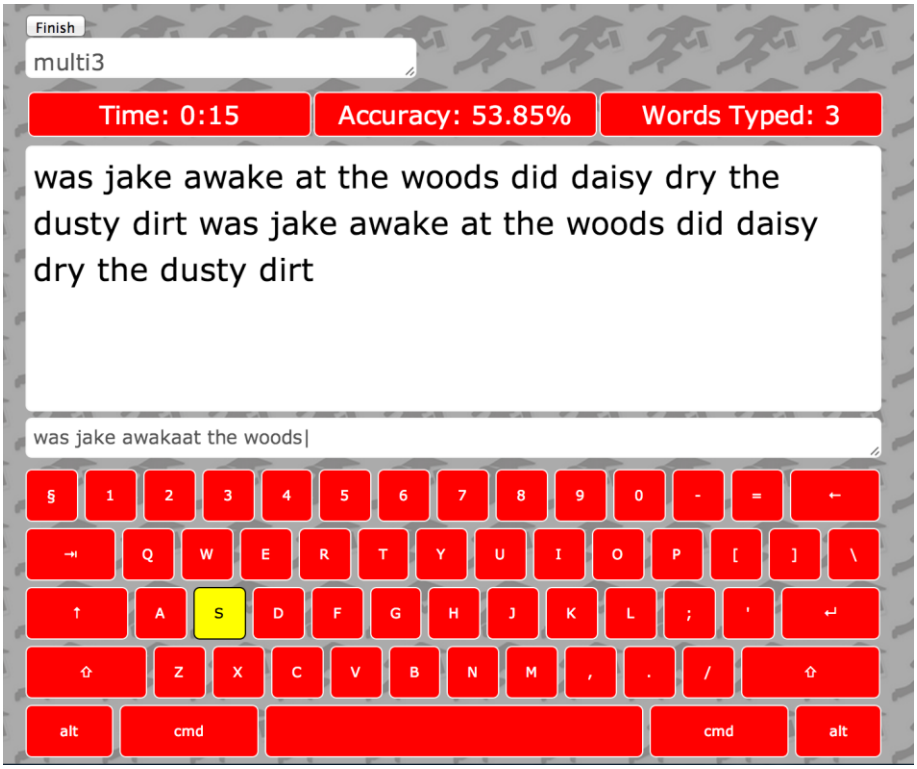


Figure 18 Screen shot of typing activity for multi user

- ***Request Password***

Web URL: http://www.ninjatypersapplication.com/send_email
Local URL: http://0.0.0.0:5000/send_email

If a user cannot remember their password, click on the link in the login area of the main page. This will redirect the user to a page will prompt the user to enter their username and the type of user they are. Their password will be emailed to their teacher.

Figure 19 Screen shot of password request

## 5. New User

- ***Create Single User Account***

Web URL: http://www.ninjatypersapplication.com/ register_singleuser
Local URL: http:///0.0.0.0:5000/register_singleuser

To create a single user account: click on the “New Single User” button on the homepage of the tool. This will redirect the user to the “Register SingleUser” page. Enter first name in first name in first textbox. Enter last name in the surname in the second textbox. Enter username in the third textbox. Enter email address in the fourth textbox. Enter password in the last textbox. Click “Register” button to register account. The user is then redirected to the login page.

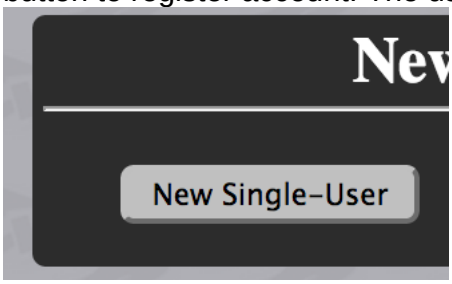


Figure 20 Screen shot of button to create a new single user account

Figure 21 Screen shot of single user registration

- ***Create Teacher Account***

- Web URL: http://www.ninjatypersapplication.com/ register_teacher
- Local URL: http://0.0.0.0:5000/register_teacher

To create a teacher account: click on the “New Teacher” button on the homepage of the tool. This will redirect the user to the “Register Teacher” page. Enter first name in first name in first textbox. Enter last name in the surname in the second textbox. Enter username in the third textbox. Enter school name in the fourth

textbox. Enter email address in the fifth textbox. Enter password in the last textbox. Click “Register” button to register account. The user is then redirected to the login page.

Figure 22 Screen shot of button for new teacher account

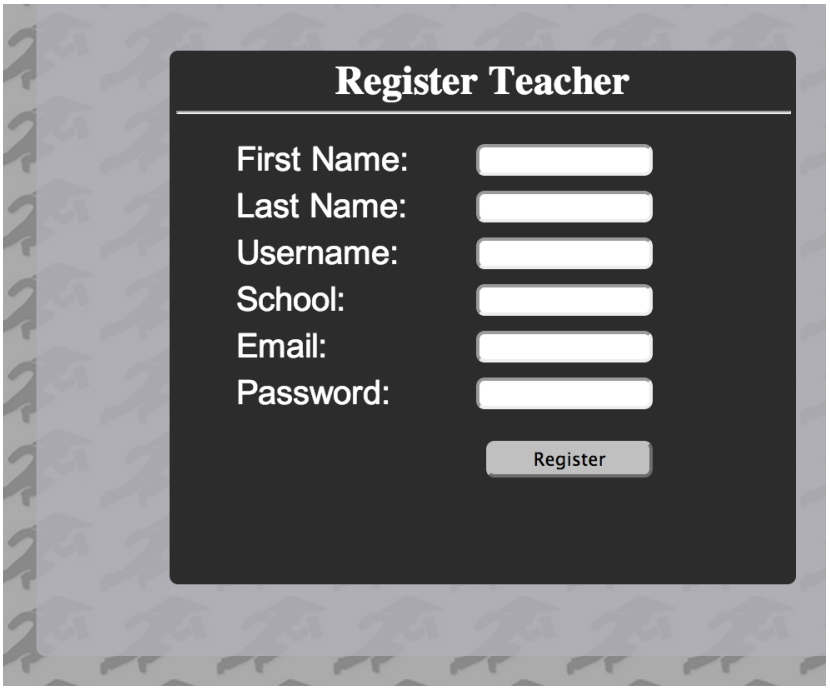


Figure 23 Screen shot of teacher account registration

## References

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