**Python Group Project**

**Group F**

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**Technology Campus Cham**

**QuickJabs: GUI for COVID-19 Vaccination Appointment using Tkinter**

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**Why QuickJabs?**

Quick Jabs is a streamlined Vaccination booking application that links to the centralized vaccination centres directory to provide the public with an easy means of booking, modifying and viewing their vaccination appointments. It skips the waiting period and slot unavailability issues usually present in the centralized website.

This application intends to provide the user with a simplified Interface and easy access to available vaccinations in the selected state.

**What can you do with QuickJabs?**

A user can enter their basic details, choose a vaccination brand and select a state in which they wish to be vaccinated. The application then returns a list of hospitals that provide the vaccine of choice and displays a calendar to select dates for first and second vaccination appointments.

**Various Functions of QuickJabs:**

**1.New Registration for Vaccination**

A simple registration form input basic user data such as FIRST NAME, LAST NAME, SEX and AGE in the form of entry fields.

PREFERRED VACCINE and PREFERRED STATE as drop-down selectable menus.

DATE for first and second shots as a selectable calendar

TIME OF VACCINATION as a choice between Forenoon (8:00 – 12:00) and Afternoon (13:00 – 17:00).

The entered data can be saved into an internal database by clicking the Submit button upon which the user will be issued a **Unique ID number** that can be used for reference and later modifications.

**Exception Handling:**

The first and last name fields require plain text and will not accept numbers or special characters, or names shorter than 3 letters.

Sex field only accepts inputs as Male, Female or Diverse.

Date selection in the calendar must have a minimum separation of 4 weeks between shots and selection of past dates will not be accepted.

**2.Search Vaccination Centres**

The user is prompted to select a state from the drop-down list on this page. Upon selection, the list of Hospitals/Vaccination Centres are displayed as a list. The list contains names of centres and the name of the Vaccine brand provided there.

**3.Modify/Cancel Appointments**

This page shows a field to enter the unique ID number an existing customer obtains when they create a new registration.

Clicking the submit button after entering the ID number shows the details of the user which was entered in the ‘New Registration’ tab (fully editable).

The user may either modify the existing data or delete the data altogether by clicking the ‘Save Changes’ button or the ‘Cancel Appointment’ button, both of which prompts a pop-up confirmation of the intended action.

**Exception Handling:**

The ID number must be a numeric value or if the entered ID number is not present in the database, a pop-up dialog box will prompt the user to check the entered data.

**4.View existing Appointments**

This page shows a field to enter the unique ID number an existing customer obtains when they create a new registration. Upon clicking the submit button, data regarding the user’s current appointments are displayed for their future reference.

In addition to it, this page also displays an information box that shows the required documents that need to be presented at the vaccination centre, as well as hypertext links to online webpages of national authorities and the official page of Robert Koch Institute.

This function is created by importing data from the SQL Lite database using PRIMARY KEY functionality.

**Exception Handling:**

The ID number must be a numeric value or if the entered ID number is not present in the database, a pop-up dialog box will prompt the user to check the entered data.

**Additional Buttons**

**Info and Contact:**

Clicking this button displays a pop-up dialog box showing the version of the software, product licence, release notes and contact details of the developers.

**Exit**

Button to close the application. Upon clicking, the user is prompted with a confirmation dialog box to close the application. Selecting ‘Yes’ closes the application while selecting ‘No’ returns to the previous page.