

CSE 360 Team Project

Project Requirements

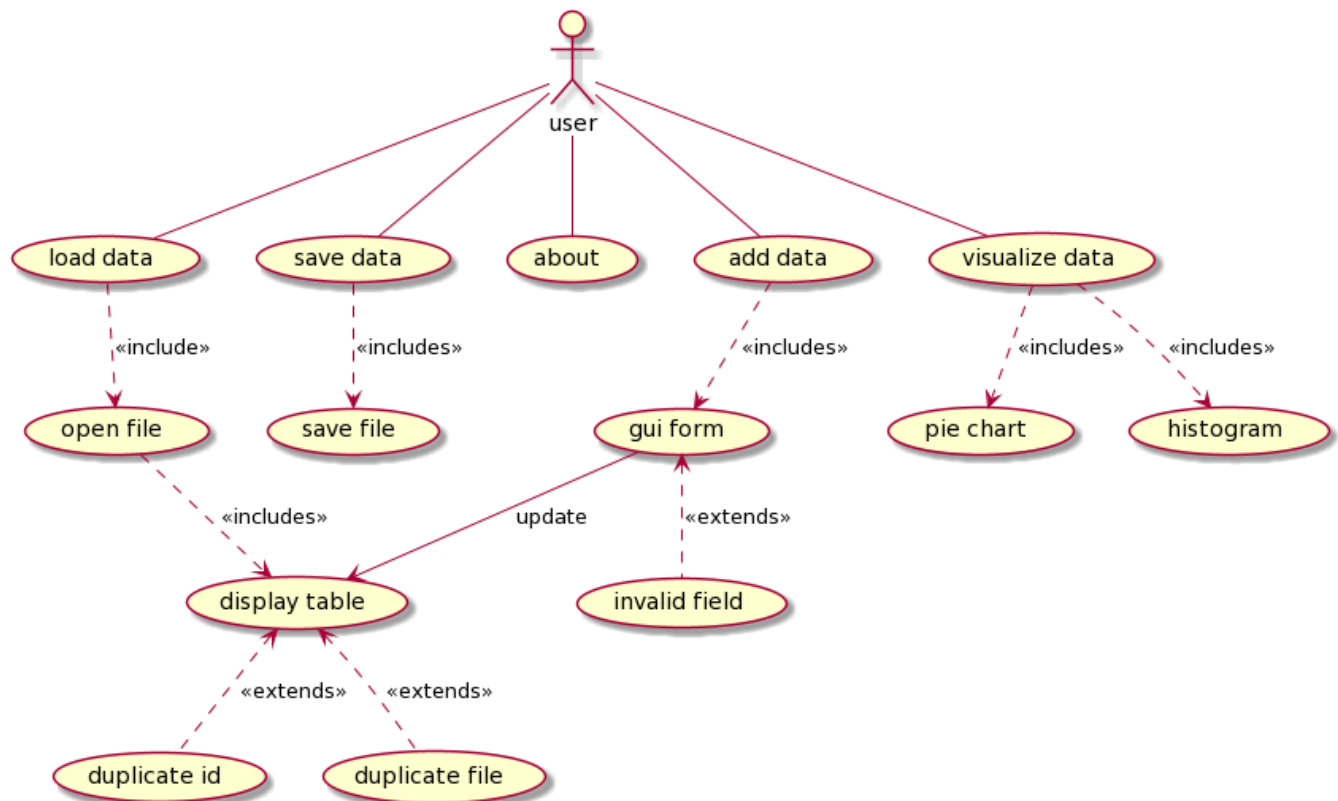
Functional Requirements

1. GUI to get and show data about COVID-19 vaccinations
2. Read data from CSV file
3. Sava data to CSV file

Non-Functional Requirements

1. Written in Java
2. No external libraries other than JFreeChart
3. Well commented
4. Lots of documentation

Use case diagram:



User stories:

1	As an user I want to load data so I can see all the vaccine data
2	As an user I want to save data so I can store and share data
3	As an user I want to add data so I can update the table with new vaccine shots
4	As an user I want to visualize data so I can better communicate progress to other people.

Project Management

Process Model

Plan driven	Agile
waterfall	scrum
v-model	kanban
incremental	XP
prototype	
spiral	

Our team decided to go with the waterfall model since our requirements are already defined for us in the project. Next we focused on the system design and picked MVC. Then we planned to have one member implement the model portion of the design, and another one implement the gui portion.

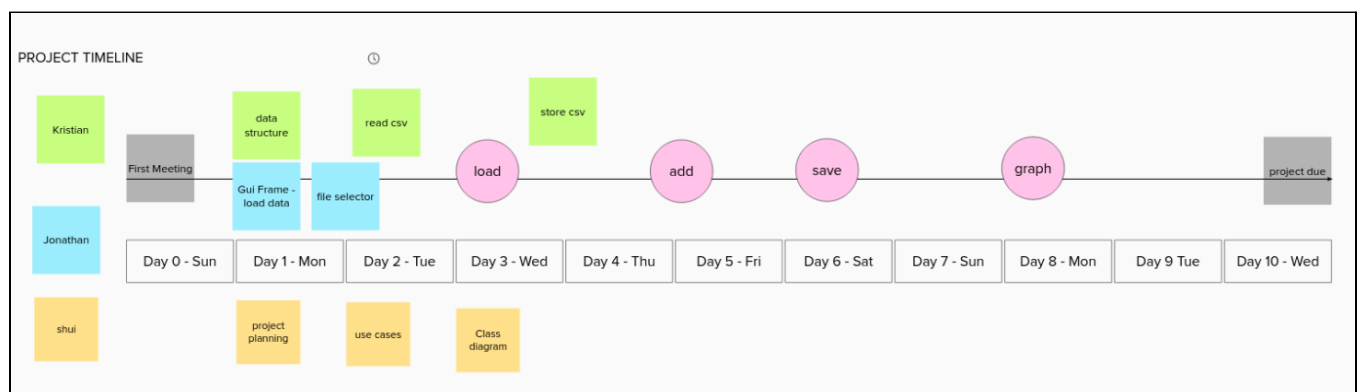
Next, we will try to perform system integration where we implement the controller and pass the model to the gui and add data input to the model. Once we have the integration done, we can perform the system testing to make sure that all the requirements are met.

Team Member Tasks:

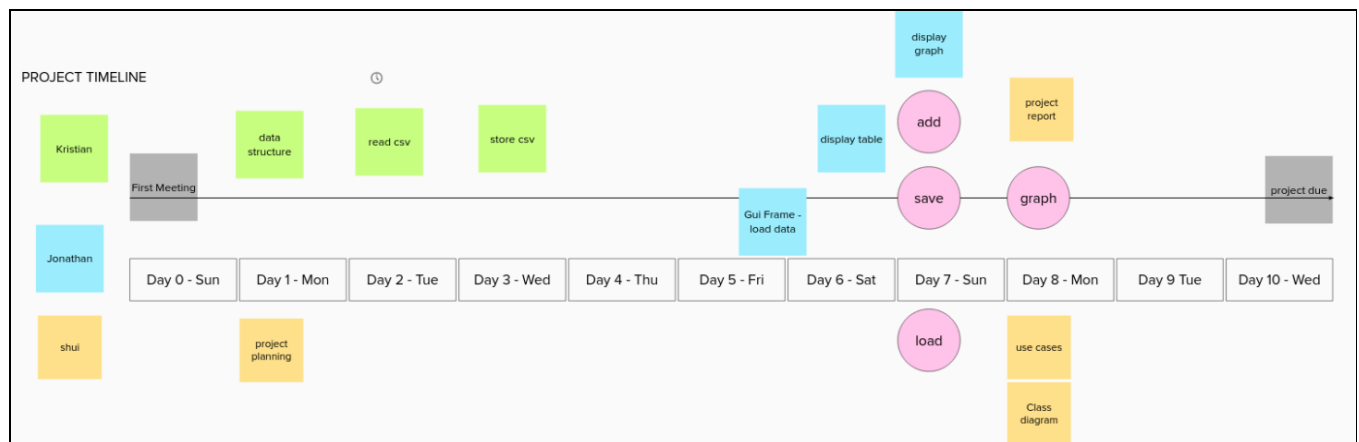
Members	Responsibility
Kritian	store/manage data
Jonathan	gui
Shui	report

Monitor Progress:

We used the web app mural to plan our activities for each day and figure out what we need and when we need it done in order to integrate the controller with the model and the gui.



However, we ran into several problems with passing the model data to the gui and vice versa on day 5, so we moved several milestones forward and delayed testing until day 8.



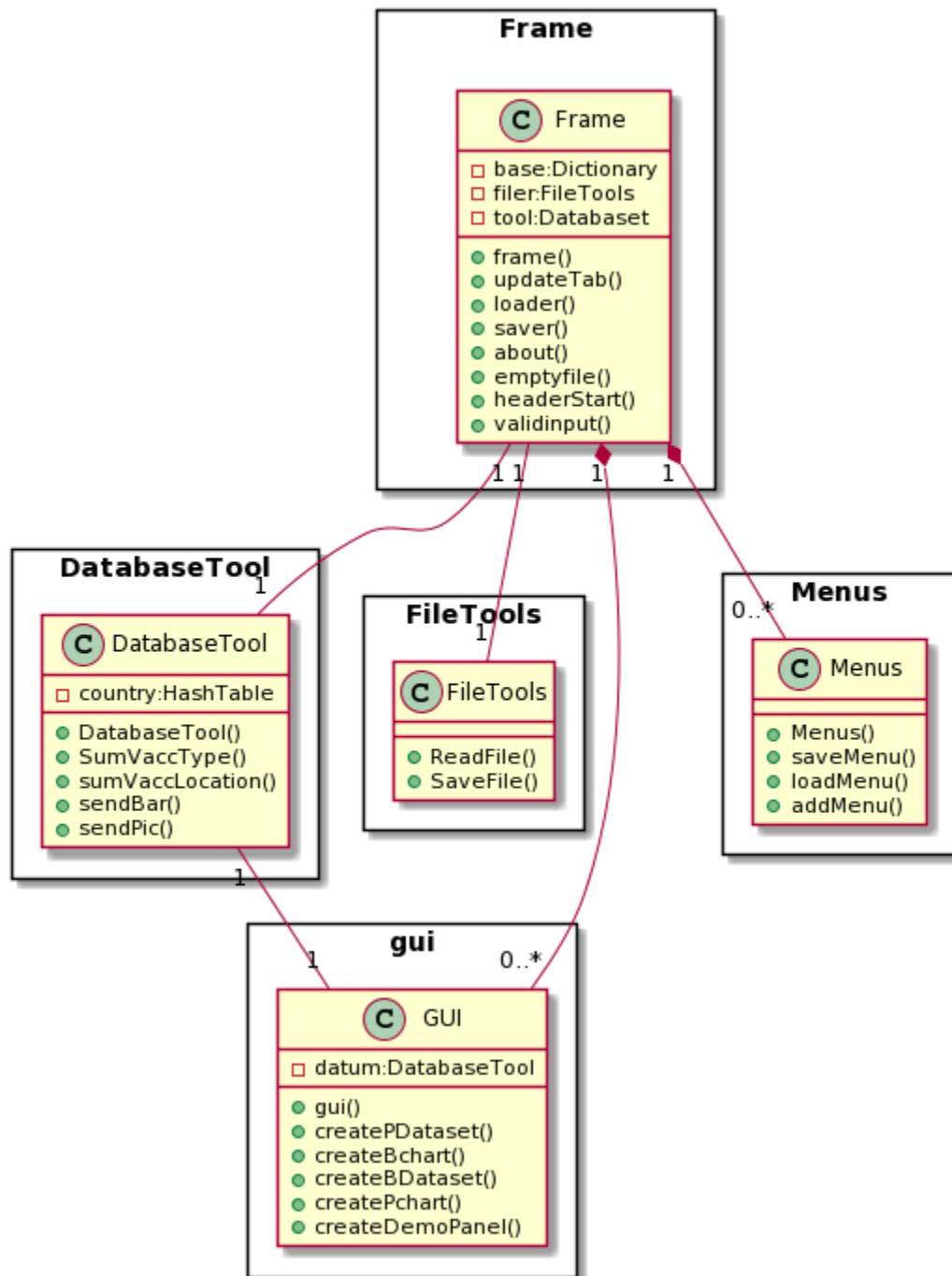
Architecture Model:

Architecture
Model-view-controller (MVC)
Layered arch.
Repository arch.
Client-server arch.
Pipe+filter arch.

For our team, we debated about several models including layered architecture, MVC, and repository. However, we settled on the MVC architecture because the separation between the data and the gui makes MVC a good fit.

With that goal in mind, we split the work where one member work on the model and figuring out which data structure would be best, another member can figure out the JFreeChart library for the GUI side of the application.

Class Diagram



Testing

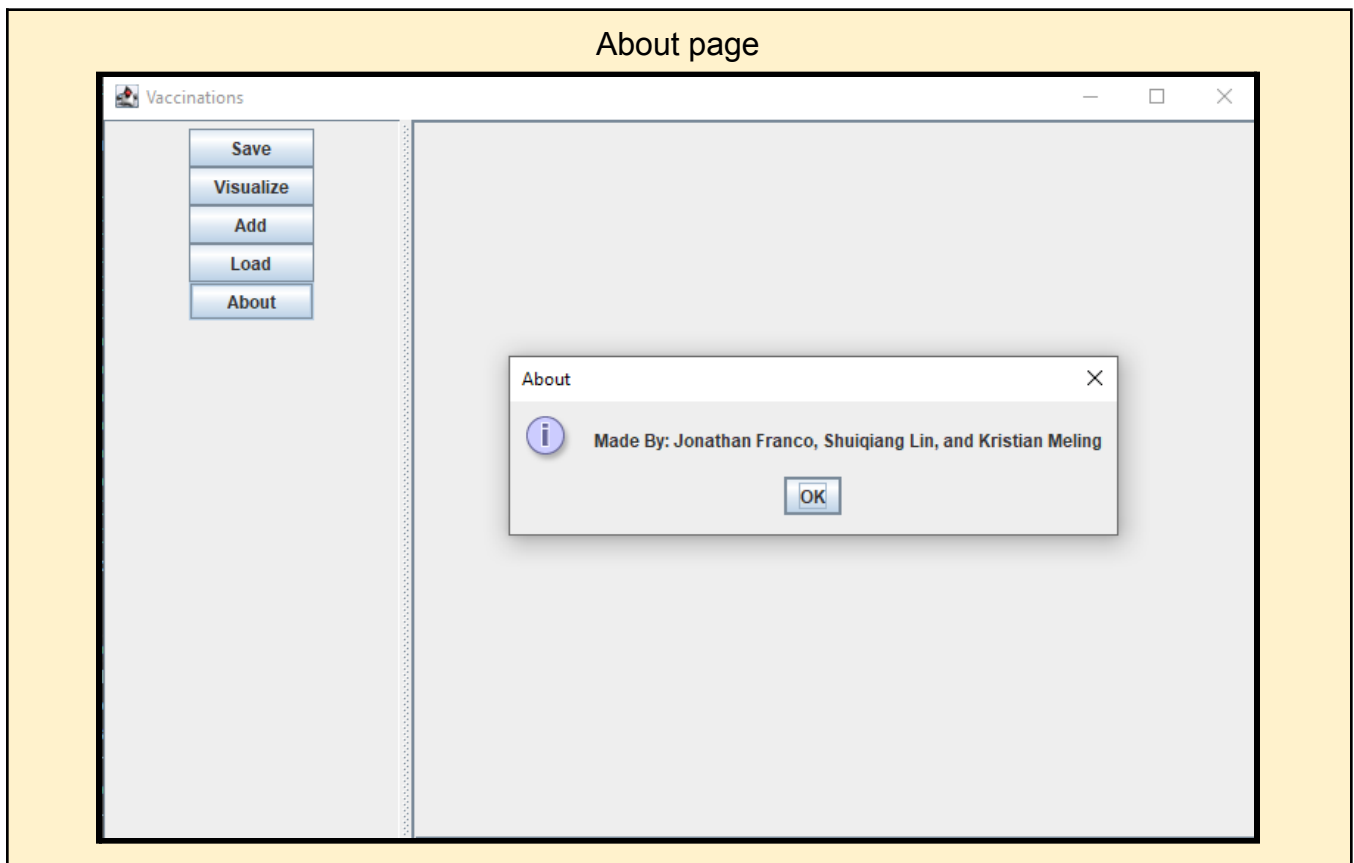
We looked through each requirement and showed that our application meets those usages. Also, the team has tested the following scenarios:

- overwriting existing data
 - replaced data in the appropriate row
- adding new data
 - Checked that new data in the table
- Invalid field (e.g. check for numerical value or string)
 - Tested with wrong dates and incorrect ID with letter
- Save to file
 - Overwritten old file with new data.

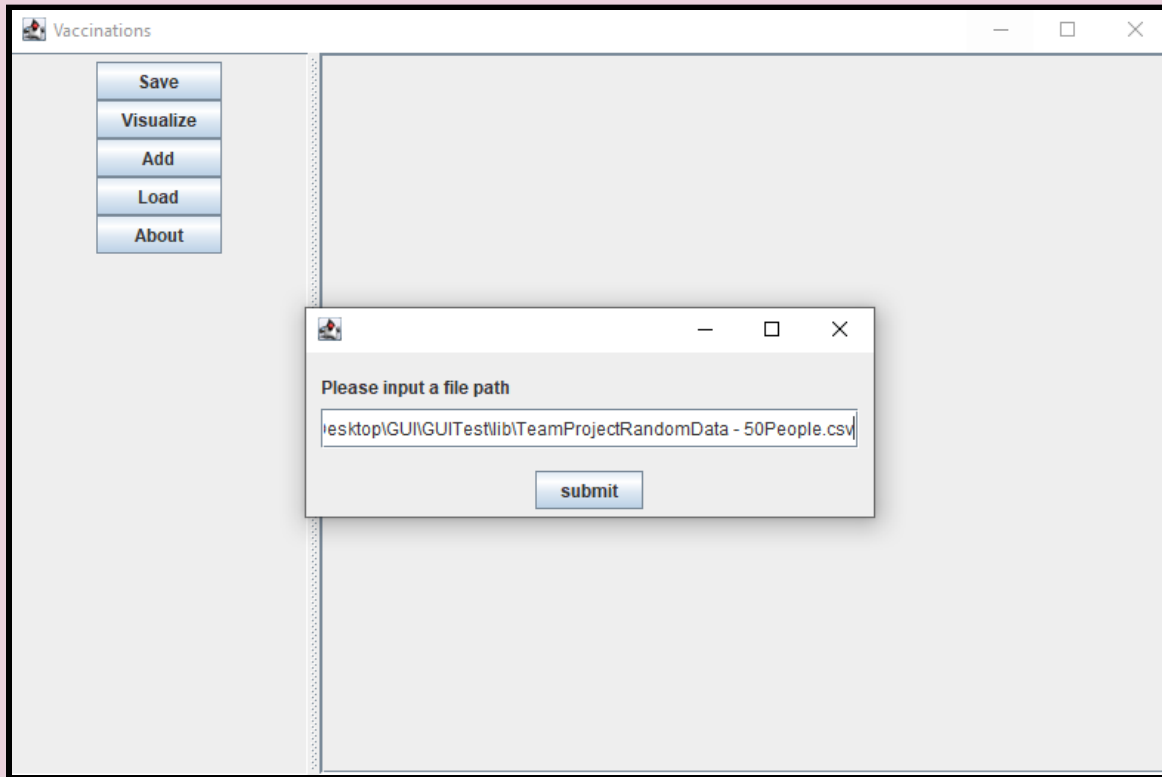
The screenshots are shown in the program execution section.

Program Execution

Provide screenshots to show how your program looks for each requirement



User file input:



Display table

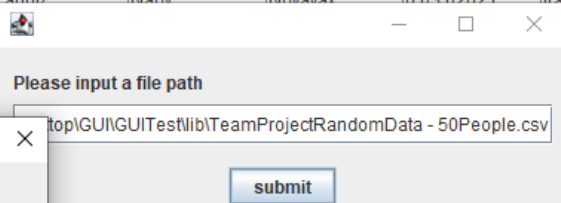
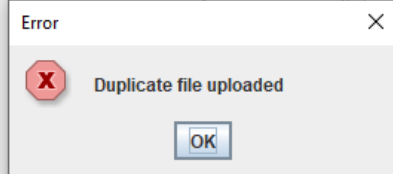
Vaccinations

ID	Last Name	First Name	Vaccine Type	Vaccination Da...	Vaccine Locati...
12345	Doe	John	Pfizer	10/30/2020	Argentina
54321	Adam	Marcline	Pfizer	11/19/2020	Russia
70513	Sitz	Tomislav	Moderna	12/2/2020	England
54371	Lyndon	Sergei	Johnson&Joh...	03/01/2021	Israel
41027	Chambers	Wallis	Moderna	01/28/2021	United States
90703	Lane	Pipra	Novavax	02/15/2021	Israel
43455	Schroder	Alexandrea	Sinovac	01/09/2021	India
29046	Van	Elizabeth	AstraZeneca	04/26/2021	Germany
80830	Glas	Gunnar	Johnson&Joh...	08/24/2021	Chile
73598	Winter	Issak	Novavax	04/30/2021	Hungary
00857	Huff	Yuusuf	Sinovac	01/17/2021	China
58566	Vukovic	Iya	Novavax	01/07/2021	Turkey
83236	Schuchard	Daphney	AstraZeneca	04/03/2021	Chile
04884	Joosten	Reneer	Sinovac	01/29/2021	Serbia
90657	Reynell	Shri	Pfizer	01/29/2021	Bahrain
93025	Clittersong	Duce	Pfizer	12/20/2020	United States

Duplicate data:

Vaccinations

ID	Last Name	First Name	Vaccine Type	Vaccination Da...	Vaccine Locati...
15216	Benn	Clara	Novavax	03/23/2021	United States
68205	Wick	John	Sinovac	03/17/2021	Russia
71775	Tuominen	Katrijn	Pfizer	01/09/2021	Israel
77571	Merrick	Paraskeve	Moderna	11/14/2020	Serbia
23080	Lauritz	Naoy	Novavax	01/31/2021	Iraq
18349	S				Russia
43010					ina
					tnam
					olumbia
	do	Stanley	Johnson&Joh...	03/31/2021	Russia
		Lamija	Pfizer	03/17/2021	India
95190	Slazak	Vera	Sinovac	03/07/2021	Chile
18044	Wehunt	Paige	Johnson&Joh...	09/22/2021	United States
91117	bnuinut	siogijn	oijhgbjni	03/12/2021	sad
68702	Cookson	Lino	Moderna	06/23/2021	China



Add data gui:

The screenshot shows a desktop application window titled "Vaccinations". On the left side of the window is a vertical toolbar with five buttons: "Save", "Visualize", "Add", "Load", and "About". The main area of the window contains a table with the following columns: "ID", "Last Name", "First Name", "Vaccine Type", "Vaccination Da...", and "Vaccine Locati...". The table lists several vaccination records. An "Add" dialog box is open in the foreground, overlapping the table. This dialog box has input fields for "ID", "Last Name", "First Name", "Vaccine Type", "Vaccination Date", and "Location", each with a corresponding label. A "submit" button is located at the bottom right of the dialog box.

ID	Last Name	First Name	Vaccine Type	Vaccination Da...	Vaccine Locati...
12345	Doe	John	Pfizer	10/30/2020	Argentina
54321	Adams				
70513	Sitz				
54371	Lynde				
41027	Chan				states
90703	Lane				
43455	Schro				
29046	Van				y
80830	Glas				
73598	Winte				
00857	Huff				
58566	Vukov				
83236	Schu				
04884	Joost				
90657	Reynell	Shri	Pfizer	01/29/2021	Bahrain
02025	Elitserova	Dusa	Pfizer	10/30/2020	United States

Invalid data field found:

Vaccinations

Save
Visualize
Add
Load
About

ID	Last Name	First Name	Vaccine Type	Vaccination Da...	Vaccine Locati...
12345	Doe	John	Pfizer	10/30/2020	Argentina
54321	Adam				
70513	Sitz				
54371	Lynde				
41027	Chan				
90703					
43455					
29046					
80830					
73598	Winte				
00857	Huff				
58566	Vukov				
83236	Schu				
04884	Joost				
90657	Reynell	Shri	Pfizer	01/29/2021	Bahrain
62025	Flitters	Duc	Pfizer	10/30/2020	United States

ID: 1332

Last Name: sad

Vaccination Date: asd

Location: das

submit

Error

Invalid input

OK

Overwrite existing row:

Vaccinations

Save
Visualize
Add
Load
About

ID	Last Name	First Name	Vaccine Type	Vaccination Da...	Vaccine Locati...
12345	Doe	John	Pfizer	10/30/2020	Argentina
54321	Adam				
70513	Sitz				
54371	Lynde				
41027	Chan				
90703					
43455					
29046					
80830					
73598	Winte				
00857	Huff				
58566	Vukov				
83236	Schu				
04884	Joost				
90657	Reynell	Shri	Pfizer	01/29/2021	Bahrain
62025	Flitters	Duc	Pfizer	10/30/2020	United States

ID: 12345

Last Name: sad

Vaccination Date: 01/22/2021

Location: das

submit

Notification

Replaced Data for the following ID: 12345

OK

User user for filename to save:

Save
Visualize
Add
Load
About

ID	Last Name	First Name	Vaccine Type	Vaccination Da...	Vaccine Locati...
15218	Benn	Clara	Novavax	05/23/2021	United States
68205	Wick	John	Sinovac	03/17/2021	Russia
71775	Tuominen	Katrijn	Pfizer	01/09/2021	Israel
77571	Merrick	Paraskeve	Moderna	11/14/2020	Serbia
23080	Lauritz	Nagy	Novavax	01/31/2021	Iraq
18349					Russia
43010					China
74572					Vietnam
50937					Colombia
88923					Russia
85094	Feldt	Lamija	Pfizer	03/17/2021	India
95190	Slazak	Vera	Sinovac	03/07/2021	Chile
18044	Wehunt	Paige	Johnson&Joh...	09/22/2021	United States
91117	bnuinut	slogijn	oijhgbjni	03/12/2021	sad
68702	Cookson	Lino	Moderna	06/23/2021	China

Please input a file name

submit

"Visualize Data"

