

## Assignment 3: Flask

Python App to create, read, update and remove student details

Creating HTML templates (building on top of bootstrap):

```
bootstrap-5.0.0-beta3-dist.zip - Assignment3 - Visual Studio Code
File Edit Selection View Go Run Terminal Help
bootstrap-5.0.0-beta3-dist.zip - Assignment3 - Visual Studio Code
File Edit Selection View Go Run Terminal Help
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.
Try the new cross-platform PowerShell https://aka.ms/pscore6
PS E:\Assignment> pip install sqlalchemy
Requirement already satisfied: sqlalchemy in c:\users\sanke\anaconda3\lib\site-packages (1.3.9)
PS E:\Assignment> [REDACTED]
```

```
bootstrap-5.0.0-beta3-dist.zip - Assignment3 - Visual Studio Code
File Edit Selection View Go Run Terminal Help
bootstrap-5.0.0-beta3-dist.zip - Assignment3 - Visual Studio Code
File Edit Selection View Go Run Terminal Help
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.
Try the new cross-platform PowerShell https://aka.ms/pscore6
PS E:\Assignment> pip install flask
Requirement already satisfied: flask in c:\users\sanke\anaconda3\lib\site-packages (1.1.1)
PS E:\Assignment> [REDACTED]
```

**base.html**

```

1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <meta charset="UTF-8">
5     <title>{{ block title }} {{ endblock }}</title>
6   </head>
7   <body>
8     {{ block body }} {{ endblock }}
9   </body>
10  </html>
11
12
13
14
15
16
17
18
19
20
21

```

**header.html**

```

1 [% extends 'base.html' %]
2
3
4
5   {{ block title }} Flask CRUD {{ endblock }}
6
7
8
9   {{ block body }}
10
11   <div class="jumbotron p-3">
12     <div class="well text-center">
13       <h1>Python Flask CRUD Web Application Development </h1>
14     </div>
15   </div>
16
17
18
19
20
21
22   {{ endblock }}

```

**index.html - Assignment3 - Visual Studio Code**

```

EXPLORER index.html X
ASSIGNMENTS
> static
> templates
  > base.html
  > header.html
  > index.html
bootstrap-5.0.0-beta3-dist.zip

templates > index.html > ...
1  [% extends 'base.html' %]
2  [% include 'header.html' %]
3
4
5
6  [% block title %] Home [% endblock %]
7
8
9
10 [% block body %]
11
12 <div class="container">
13   <div class="row">
14     <div class="col md-12">
15
16       <div class="jumbotron p-3">
17
18         <h2>Manage <b>Employees </b> <button type="button" class="btn btn-success float-right" data-toggle="modal" data-target="#myModal">Add New Employees</button> </h2>
19
20
21
22       [% with messages = get_flashed_messages() %]
23
24       [% if messages %]

```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

Windows PowerShell  
Copyright (C) Microsoft Corporation. All rights reserved.  
Try the new cross-platform PowerShell https://aka.ms/pscore6

```

PS E:\Assignment3> pip install sqlalchemy
Requirement already satisfied: sqlalchemy in c:\users\sanke\anaconda3\lib\site-packages (1.3.9)
PS E:\Assignment3> []

```

OUTLINE

Type here to search

File Edit Selection View Go Run Terminal Help base.html - Assignment3 - Visual Studio Code

```

EXPLORER Python - Get Started index.html base.html App.py
ASSIGNMENTS
> static
> templates
  > base.html
  > index.html
  > App.py
bootstrap-5.0.0-beta3-dist.zip

Python - Get Started index.html base.html App.py

templates > base.html > html > body
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4
5    <link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.4.1/css/bootstrap.min.css"
6
7    <meta charset="UTF-8">
8    <meta http-equiv="X-UA-Compatible" content="IE=edge">
9    <meta name="viewport" content="width=device-width, initial-scale=1.0">
10   <title> [% block title %] [% endblock %]</title>
11
12 </head>
13 <body>
14
15   [% block body %] [% endblock %]
16
17   <script src="https://code.jquery.com/jquery-3.4.1.slim.min.js" integrity="sha384-J6qa4849bE2+poT4WnyKhv5vI" integrity="sha384-Q6E9R

```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

```

PS E:\Assignment3> & C:/Users/sanke/Anaconda3/python.exe e:/Assignment3/App.py
* Environment: production
WARNING: This is a development server. Do not use it in a production deployment.
Use a production WSGI server instead.
* Debug mode: on
* Restarting with windowsapi reloader
* Debugger is active!
* Debugger PID: 298-725-243
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
127.0.0.1 - - [27/Mar/2021 19:55:15] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [27/Mar/2021 19:56:01] "GET / HTTP/1.1" 200 -
* Detected change in 'C:\\Users\\sanke\\Anaconda3\\lib\\encodings\\\\_pycache_\\unicode_escape.cpython-37.pyc', reloading
127.0.0.1 - - [27/Mar/2021 20:03:33] "GET / HTTP/1.1" 200 -

```

Python 3.7.4 64-bit (conda) Type here to search

Ln 19, Col 1 Spaces: 4 UTF-8 CRLF HTML

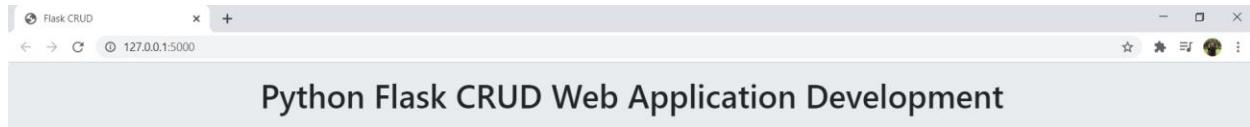
Ln 1, Col 1 Spaces: 3 UTF-8 CRLF HTML

7:33 PM 3/27/2021

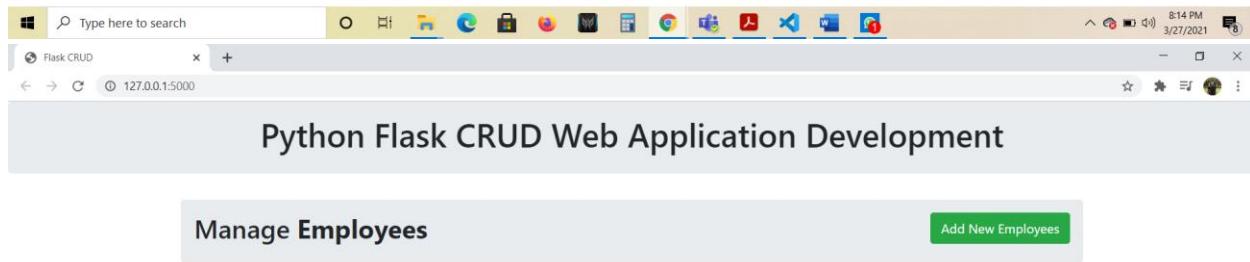
2: Python

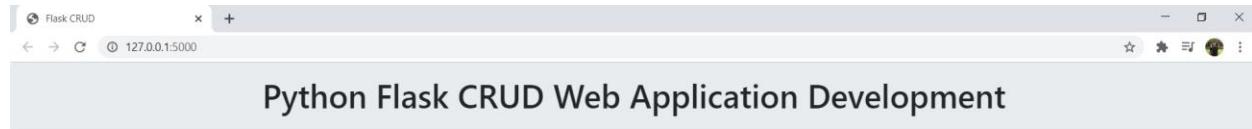
Ln 19, Col 1 Spaces: 4 UTF-8 CRLF HTML

8:08 PM 3/27/2021



## From Template Inheritance

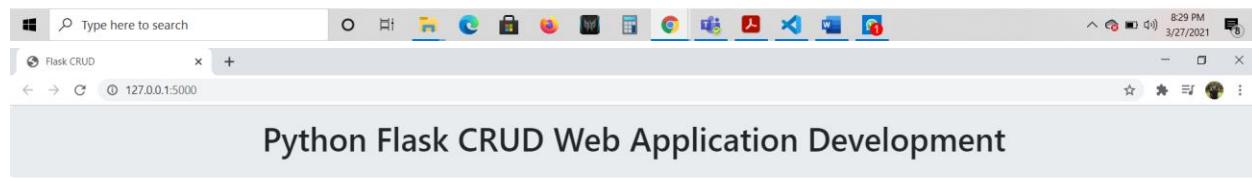




### Manage Employees

ID	Name	Email	Phone	Action
01	Sanket	abc@xyz.com	987654321	<a href="#">Edit</a>

[Add New Employees](#)



### Manage Employees

ID	Name	Email	Phone	Action
01	Sanket	abc@xyz.com	987654321	<a href="#">Edit</a>

[Add New Employees](#)

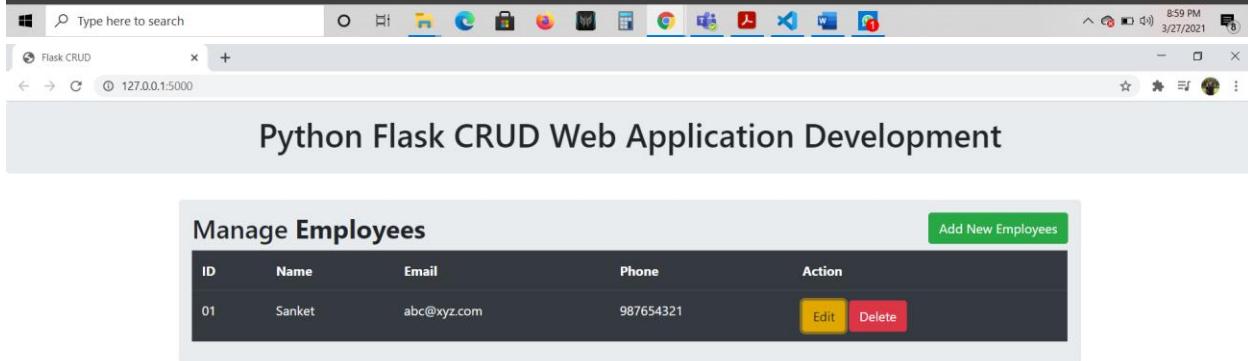
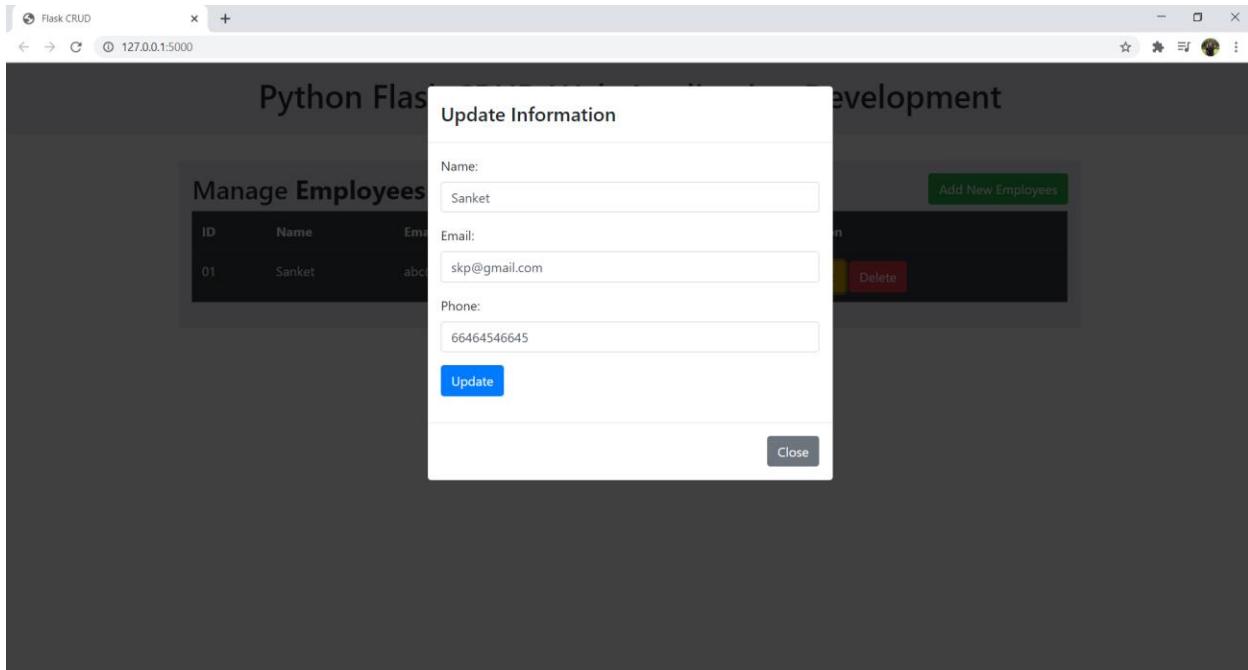


The screenshot shows a web browser window titled "Python Flask CRUD Web Application Development". The main content area is titled "Manage Employees". It displays a table with one row of data:

ID	Name	Email	Phone	Action
01	Sanket	abc@xyz.com	987654321	<button>Edit</button> <button>Delete</button>

A green button labeled "Add New Employees" is located in the top right corner of the table area.

The screenshot shows a Windows desktop environment with a taskbar at the bottom. A web browser window titled "Flask CRUD" is open, displaying the "Manage Employees" page. A modal dialog box titled "Add Employee" is overlaid on the page. The modal contains three input fields: "Name:", "Email:", and "Phone:". Below the fields is a blue "Add Employee" button, and at the bottom right of the modal is a "Close" button.



## Flask App:

First I have created employee mvp to atleast run app sucessfully and later I will change it for students.

File Edit Selection View Go Run Terminal Help

App.py - Assignment3 - Visual Studio Code

OPEN EDITORS

- X App.py
- ASSIGNMENT3
- > \_pycache\_
- > static
- > templates
- App.py
- bootstrap-5.0.0-beta3-dist.zip

App.py

```
from flask import Flask, render_template
from flask_sqlalchemy import SQLAlchemy

app = Flask(__name__)
app.secret_key = ""

#SqlAlchemy Database Configuration With Mysql
app.config['SQLALCHEMY_DATABASE_URI'] = 'mysql://root:''@localhost/crud'
app.config['SQLALCHEMY_TRACK_MODIFICATIONS'] = False

db = SQLAlchemy(app)
```

PROBLEMS OUTPUT TERMINAL DEBUG CONSOLE

PS C:\Assignment3> python

```
Python 3.7.4 (default, Aug  9 2019, 18:34:13) [MSC v.1915 64 bit (AMD64)] :: Anaconda, Inc. on win32
```

Warning:  
This Python interpreter is in a conda environment, but the environment has  
not been activated. Libraries may fail to load. To activate this environment  
please see https://conda.io/activation

Type "help", "copyright", "credits" or "license" for more information.

```
>>> from APP import db
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
ModuleNotFoundError: No module named 'APP'
>>> from App import db
>>> db.create_all()
>>> 
```

OUTLINE

Python 3.7.9 64-bit (aiida-1.10.0: conda) 0 0 0

Type here to search

localhost / 127.0.0.1 / crud / data

localhost/phpmyadmin/index.php?route=/sql&server=1&db=crud&table=data&pos=0

phpMyAdmin

Server: 127.0.0.1 > Database: crud > Table: data

Browse Structure SQL Search Insert Export Import Privileges Operations Tracking Triggers

MySQL returned an empty result set (i.e. zero rows). (Query took 0.0018 seconds.)

SELECT \* FROM `data`

Profiling | Edit inline | Explain SQL | Create PHP code | Refresh

ID	Name	Email	Phone

Query results operations

Create view

Bookmark this SQL query

Label:  Let every user access this bookmark

Console

Type here to search

1054 PM 3/27/2021

The screenshot shows a Visual Studio Code interface with the following details:

- File Explorer (Left):** Shows open editors: "App.py" (1 UNSAVED), "Assignment3", and "bootstrap-5.0.0-beta3-dist.zip".
- Code Editor (Center):** Displays the content of "App.py". The code defines a Flask application with routes for displaying index.html and inserting data into a database. It uses SQLAlchemy to interact with a database named "Data".

```
self.email = email
self.phone = phone

@app.route('/')
def Index():
    return render_template("index.html")

@app.route('/insert', method=["POST"])
def insert():
    if request.method == "POST":
        name = request.form['name']
        email = request.form['email']
        phone = request.form['phone']

        my_data = Data(name, email, phone)
        db.session.add(my_data)
        db.session.commit()

    return redirect(url_for('Index'))
```
- Terminal (Bottom):** Shows a Python shell session starting with "1: python".

```
>>> from App import db
>>> db.create_all()
>>> []
```
- Status Bar (Bottom):** Shows the Python version ("Python 3.7.9 64-bit (aidi-1100: conda)"), file path ("C:\Users\adi\PycharmProjects\Assignment3\app.py"), and other system information.

As we can see there is no data currently

The screenshot shows the phpMyAdmin interface for a MySQL database named 'crud'. The left sidebar lists databases: 'New', 'crud', 'New', 'data', 'Columns', 'Indexes', 'information\_schema', 'mysql', 'performance\_schema', 'phpmyadmin', and 'test'. The 'data' database is selected. The main area shows the 'data' table with columns: id, name, email, and phone. A query result table is displayed with one row: id=1, name='John Doe', email='john.doe@example.com', and phone='123-4567'. Below the table are buttons for 'Query results operations' (Create view, Bookmark this SQL query), a label input field, and a checkbox for letting every user access the bookmark.

The screenshot shows a Windows desktop environment with three windows open:

- Flask CRUD Application:** A web page titled "Python Flask Development" with a modal dialog titled "Add Employee". The modal contains fields for Name (Sanket), Email (skp123@gmail.com), and Phone (34687462). A "Add Employee" button is at the bottom right.
- MySQL Database:** A screenshot of the phpMyAdmin interface showing the "data" table. The table has columns: id, name, email, and phone. One row is visible with id 4, name Sanket, email skp123@gmail.com, and phone 34687462.
- Taskbar:** The Windows taskbar at the bottom shows several pinned icons and the system tray.

adding more

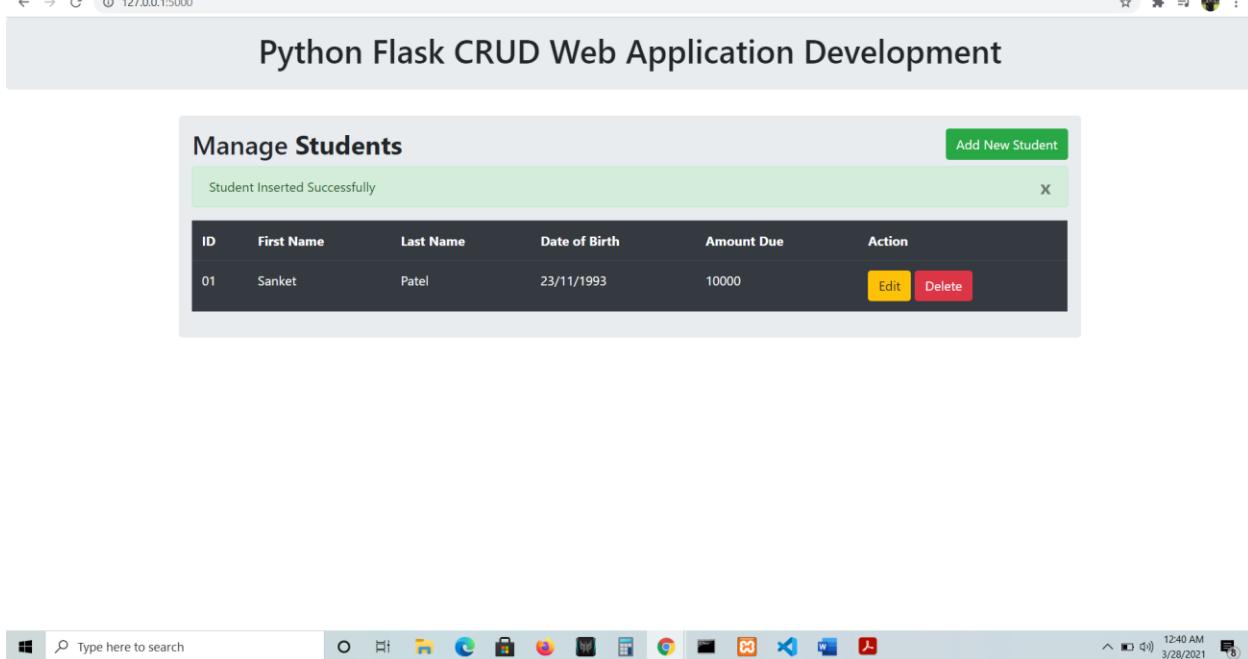
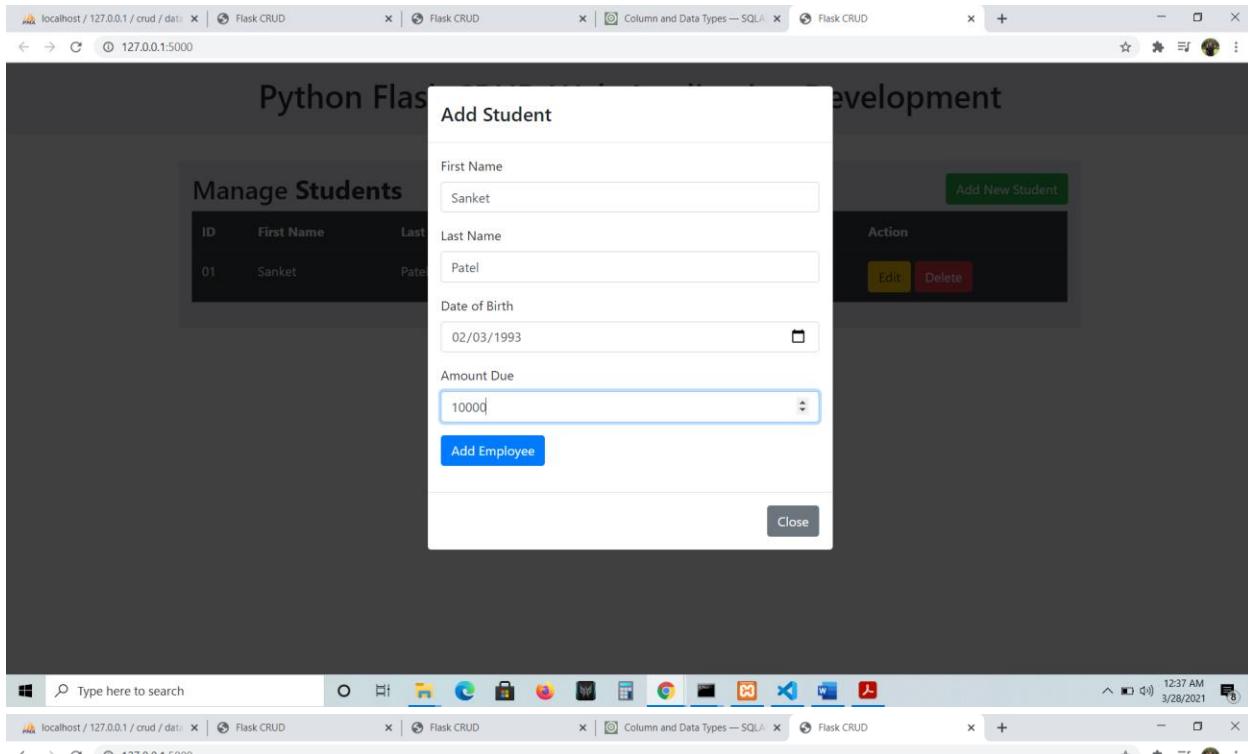
The screenshot displays two windows side-by-side. The left window is a web browser showing a Flask application's employee management interface. The title bar says "localhost / 127.0.0.1 / crud / data" and the address bar shows "127.0.0.1:5000". The main content is titled "Python Flask Development" and "Manage Employees". It shows a table with columns ID, Name, Email, and Phone. There are entries for ID 01, Name Sanket, Email abc@gmail.com, and Phone 34687462. A modal dialog titled "Add Employee" is open, prompting for Name (Sikder), Email (skdr@xyz.com), and Phone (236786868). A green button "Add Employee" is visible at the bottom of the modal. The right window is another web browser showing the phpMyAdmin interface. The title bar says "localhost / 127.0.0.1 / crud / data" and the address bar shows "localhost/phpmyadmin/index.php?route=/sql&db=crud&table=data&pos=0". The sidebar shows databases like New, crud, information\_schema, mysql, performance\_schema, phpmyadmin, and test. The main area shows a table named "data" with columns id, name, email, and phone. It contains two rows: one for Sanket (id 4) and one for Sikder (id 5). Below the table are buttons for operations like Edit, Copy, Delete, and Export.

As we can see, the entry is getting added

The screenshot shows a web browser window titled "Python Flask CRUD Web Application Development". The main content area is titled "Manage Employees". A green success message box displays "Employee Inserted Successfully". Below it is a table with columns: ID, Name, Email, Phone, and Action. The table contains one row with ID 01, Name Sanket, Email abc@xyz.com, and Phone 987654321. The Action column for this row contains two buttons: "Edit" (yellow) and "Delete" (red). In the top right corner of the main content area, there is a green button labeled "Add New Employees".



**Since we have built basic webapp, we can change Employees to students. And change column names**



## READ Retrieval:

The screenshot shows a web browser window with four tabs open. The active tab is titled "Python Flask CRUD Web Application Development". The page content is titled "Manage Students" and displays a table with two rows of student data. The columns are labeled: ID, First Name, Last Name, Date of Birth, Amount Due, and Action. Each row contains an "Edit" button and a "Delete" button.

ID	First Name	Last Name	Date of Birth	Amount Due	Action
1	Sanket	Patel	23/11/1993	10000	<button>Edit</button> <button>Delete</button>
2	Sanket	Patel	23/11/1993	10000	<button>Edit</button> <button>Delete</button>

The screenshot shows the Visual Studio Code interface with the file "index.html" open. The code is an HTML template for displaying a list of students. It includes a table with columns for student ID, first name, last name, date of birth, amount due, and actions. The "Action" column contains buttons for "Edit" and "Delete". The code uses Jinja2 syntax to iterate over a list of students.

```
<th>Amount Due</th>
<th>Actions</th>
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 1 | Sanket | Patel | 23/11/1993 | 10000 | Edit Delete |
| 2 | Sanket | Patel | 23/11/1993 | 10000 | Edit Delete |

```

The VS Code interface also shows the file structure on the left, including "index.html", "base.html", "header.html", and "App.py". The bottom status bar indicates the Python 3.7.4 64-bit ('base': conda) environment is active, and the terminal shows the application is running on port 5000.

localhost / 127.0.0.1 / crud / data | Flask CRUD | Column and Data Types — SQLA | Flask CRUD | +

localhost / 127.0.0.1 / crud / data | Flask CRUD | Column and Data Types — SQLA | Flask CRUD | +

localhost / 127.0.0.1 / crud / data | Flask CRUD | Column and Data Types — SQLA | Flask CRUD | +

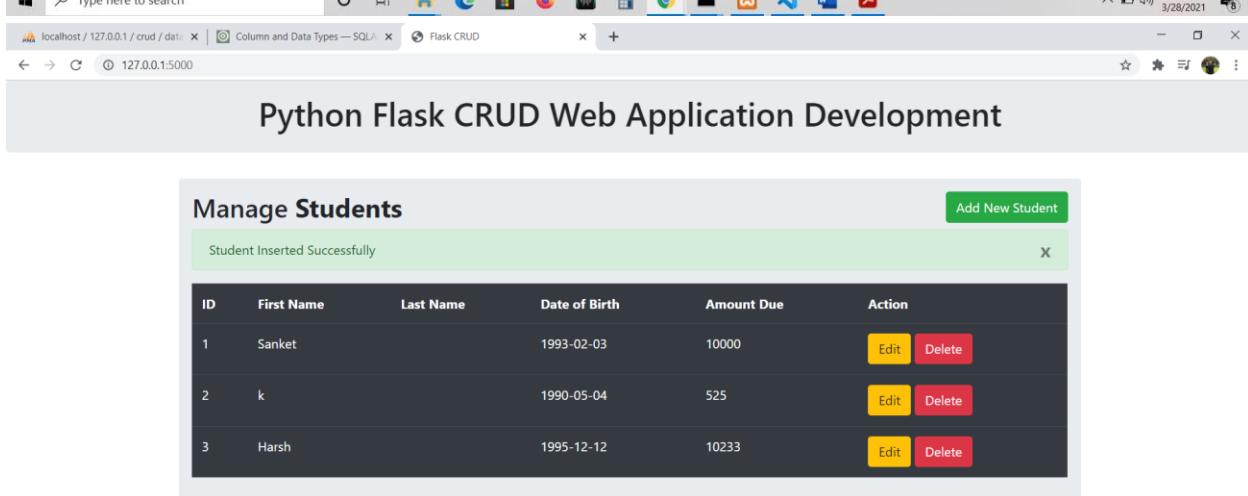
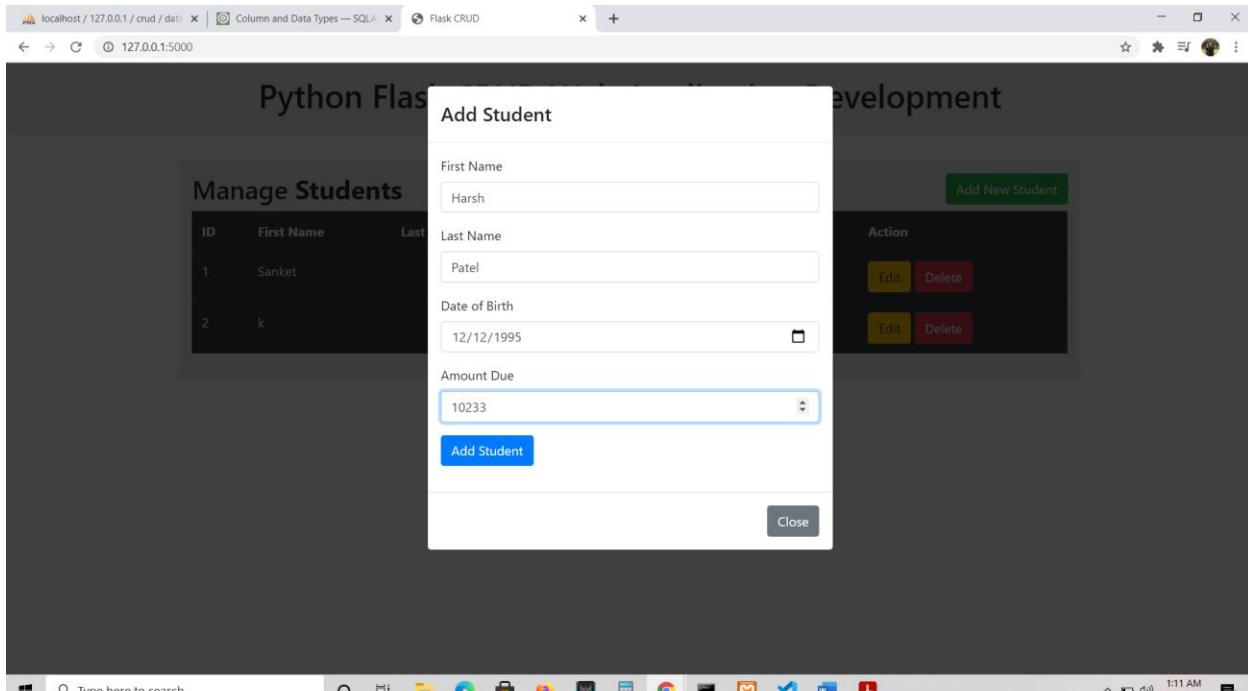
localhost / 127.0.0.1 / crud / data | Flask CRUD | Column and Data Types — SQLA | Flask CRUD | +

## Python Flask CRUD Web Application Development

### Manage Students

ID	First Name	Last Name	Date of Birth	Amount Due	Action
1	Sanket		1993-02-03	10000	<button>Edit</button> <button>Delete</button>
2	k		1990-05-04	525	<button>Edit</button> <button>Delete</button>

Let's try adding a new student



We can see that new student is now added

The screenshot shows the Visual Studio Code interface with the file `index.html` open. The code contains a modal dialog structure. A syntax error is highlighted at line 69:

```
<td>{{row.student_id}}</td>
<td>{{row.first_name}}</td>
<td>{{row.last_name}}</td>
<td>{{row.dob}}</td>
<td>{{row.amount_due}}</td>
<td>Follow link (ctrl + click)
  <a href="/update/{{row.student_id}}" class="btn btn-warning btn-xs" data-toggle="modal" data-target="#editModal">Edit</a>
  <a href="#" class="btn btn-danger btn-xs" onclick="return confirm('Are you sure To Delete?')">Delete</a>
</td>
```

The terminal window shows the following Python code and its output:

```
SyntaxError: invalid syntax
>>> from App import db
>>> db.create_all()
>>> 
```

Output in the terminal:

```
Ln 69, Col 63 (17 selected) Spaces: 3 139 AM 3/28/2021
```

The screenshot shows the Visual Studio Code interface with the file `index.html` open. The code displays a modal dialog form. A portion of the code is shown below:

```
<k> > <div id="modaledit({row.id}).modal.fade" class="modal-dialog" style="display: none; opacity: 0; transform: translate(-50%, -50%);>
  <div class="modal-content">
    <div class="modal-body">
      <form>
        <div class="form-group">
          <label>Date of Birth</label>
          <input type="date" class="form-control" name="dob" value="{{row.dob}}"/>
        </div>
        <div class="form-group">
          <label>Amount Due</label>
          <input type="number" class="form-control" name="amount_due" value="{{row.amount_due}}"/>
        </div>
      </form>
    </div>
  </div>
</k>
```

The terminal window shows the following Python code and its output:

```
127.0.0.1 - - [28/Mar/2021 01:07:58] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [28/Mar/2021 01:09:43] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [28/Mar/2021 01:09:51] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [28/Mar/2021 01:11:39] "POST /insert HTTP/1.1" 302 -
127.0.0.1 - - [28/Mar/2021 01:11:39] "GET / HTTP/1.1" 200 -
```

Output in the terminal:

```
Ln 140, Col 85 (19 selected) Spaces: 3 139 AM 3/28/2021
```

The screenshot shows a web browser window with the title "Python Flask CRUD Web Application Development". The main content is a table titled "Manage Students" with the following data:

ID	First Name	Last Name	Date of Birth	Amount Due	Action
1	Sanket		1993-02-03	10000	<button>Edit</button> <button>Delete</button>
2	k		1990-05-04	525	<button>Edit</button> <button>Delete</button>
3	Harsh		1995-12-12	10233	<button>Edit</button> <button>Delete</button>

A green button labeled "Add New Student" is located at the top right of the table.

The screenshot shows a MySQL Workbench interface with a table named "student". The data is as follows:

student_id	first_name	last_email
1	Sanket	NULL
2	k	NULL
3	Harsh	NULL

The "last\_email" column is explicitly shown as NULL, indicating that the last name is not stored in the database.

## Let's debug

The screenshot shows a Visual Studio Code interface with the following details:

- File Explorer (Left):** Shows the project structure with files like index.html, base.html, header.html, App.py, and various static and template files.
- Editor (Top Right):** The active editor tab is "App.py". The code defines a database model "Data" with fields for student\_id, first\_name, last\_email, dob, and amount\_due. It also includes a constructor and a class variable "last\_email".

```
#SqlAlchemy Database Configuration With Mysql
app.config['SQLALCHEMY_DATABASE_URI'] = 'mysql://r...email
app.config['SQLALCHEMY_TRACK_MODIFICATIONS'] = False

db = SQLAlchemy(app)

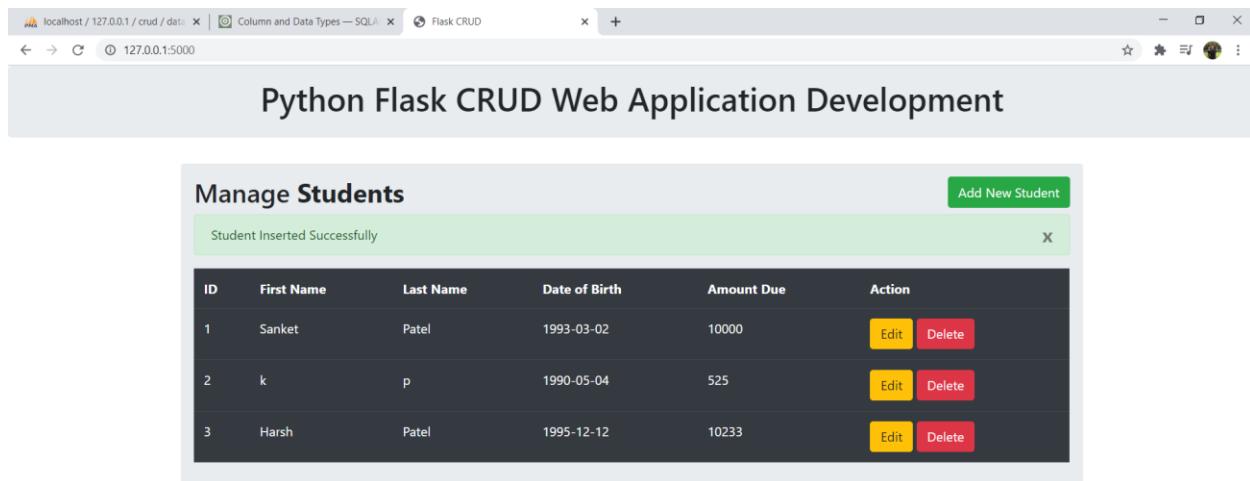
#Creating model table for our CRUD database
class Data(db.Model):
    student_id = db.Column(db.Integer, primary_key = True)
    first_name = db.Column(db.String(100))
    last_email = db.Column(db.String(100))
    dob = db.Column(db.Date())
    amount_due = db.Column(db.String(100))

    def __init__(self, first_name, last_name, dob, amount_due):

        self.first_name = first_name
        self.last_name = last_name
        self.dob = dob
        self.amount_due = amount_due
```
- Terminal (Bottom):** Shows the command line output of the application running on port 5000.
- Status Bar (Bottom):** Displays the Python version (Python 3.7.4 64-bit), file count (13), and other system information.

here's the bug

## Let's fix it



## Update:

We are able to read now

The screenshot shows the Visual Studio Code interface. The top menu bar includes File, Edit, Selection, View, Go, Run, Terminal, and Help. The title bar indicates "App.py - Assignment3 - Visual Studio Code". The Explorer sidebar shows a project structure with "OPEN EDITORS 1 UNSAVED" and a folder named "ASSIGNMENT3" containing files like \_\_pycache\_\_, static, templates, and index.html. The main editor area displays Python code for an application. The code includes routes for inserting and updating student data, using Flask's flash and redirect functions. A terminal window at the bottom shows a Python session where a syntax error occurs when trying to import db from App.

```
53
54     flash("Student Inserted Successfully")
55
56     return redirect(url_for('Index'))
57
58
59 #this is our update route where we are going to update our employee
60 @app.route('/update', methods = ['GET', 'POST'])
61 def update():
62
63     if request.method == 'POST':
64         my_data = Data.query.get(request.form.get('id'))
65
66         my_data.first_name = request.form['first_name']
67         my_data.last_name = request.form['last_name']
68         my_data.dob = request.form['dob']
69         my_data.amount_due = request.form['amount_due']
70
71         db.session.commit()
72         flash("Employee Updated Successfully")
73
74     return redirect(url_for('Index'))
75
```

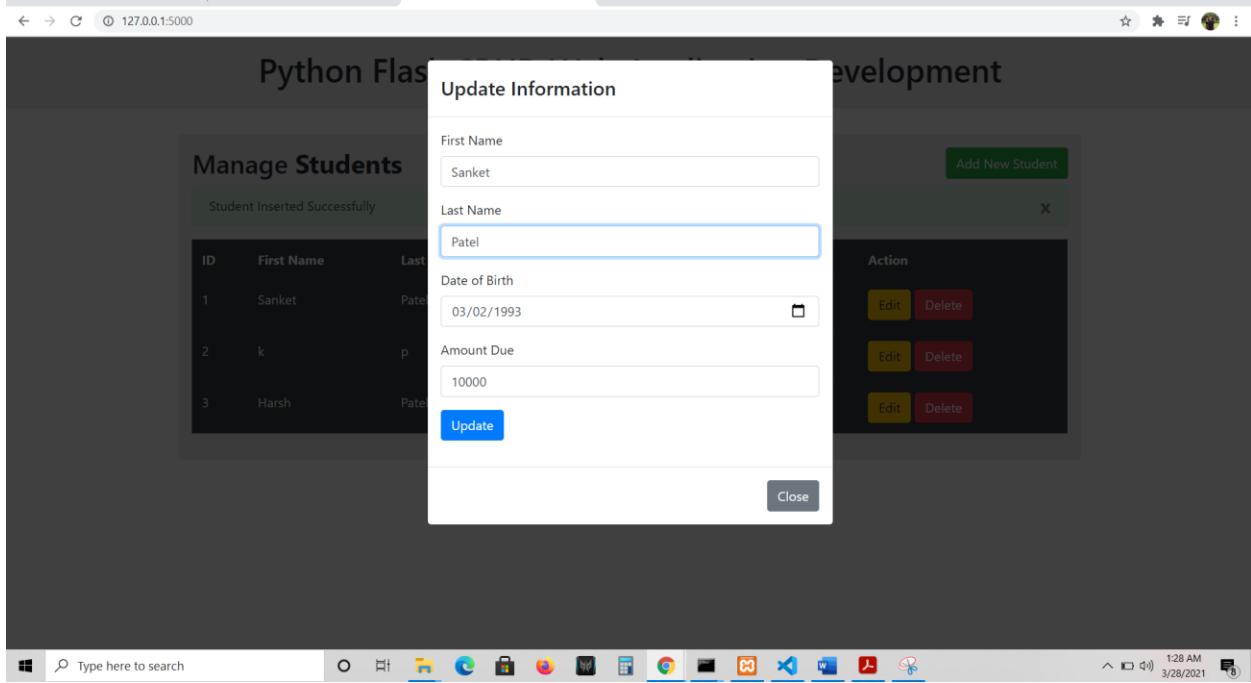
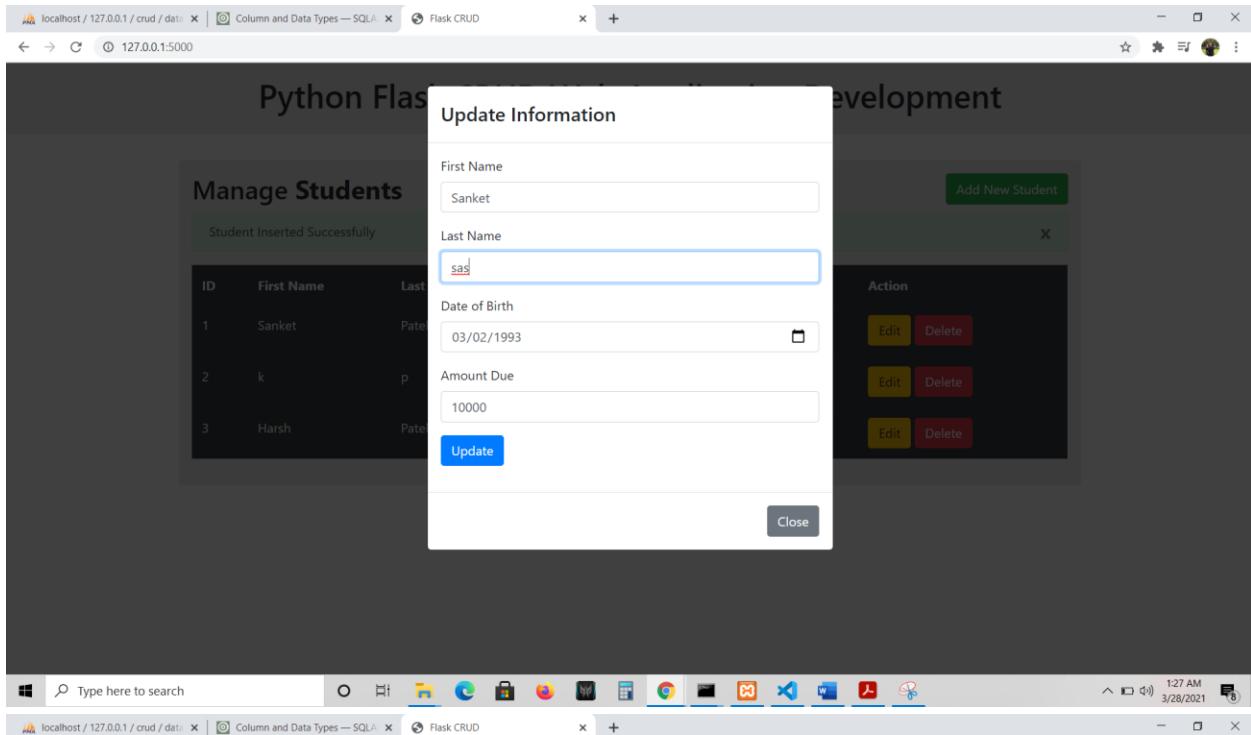
PROBLEMS 13 OUTPUT TERMINAL DEBUG CONSOLE

```
^
SyntaxError: invalid syntax
>>> from App import db
>>> db.create_all()
>>> [
```

Ln 60, Col 1 (375 selected) Spaces: 4 UTF-8 CRLF Python 2: python

Type here to search

We can edit student details now



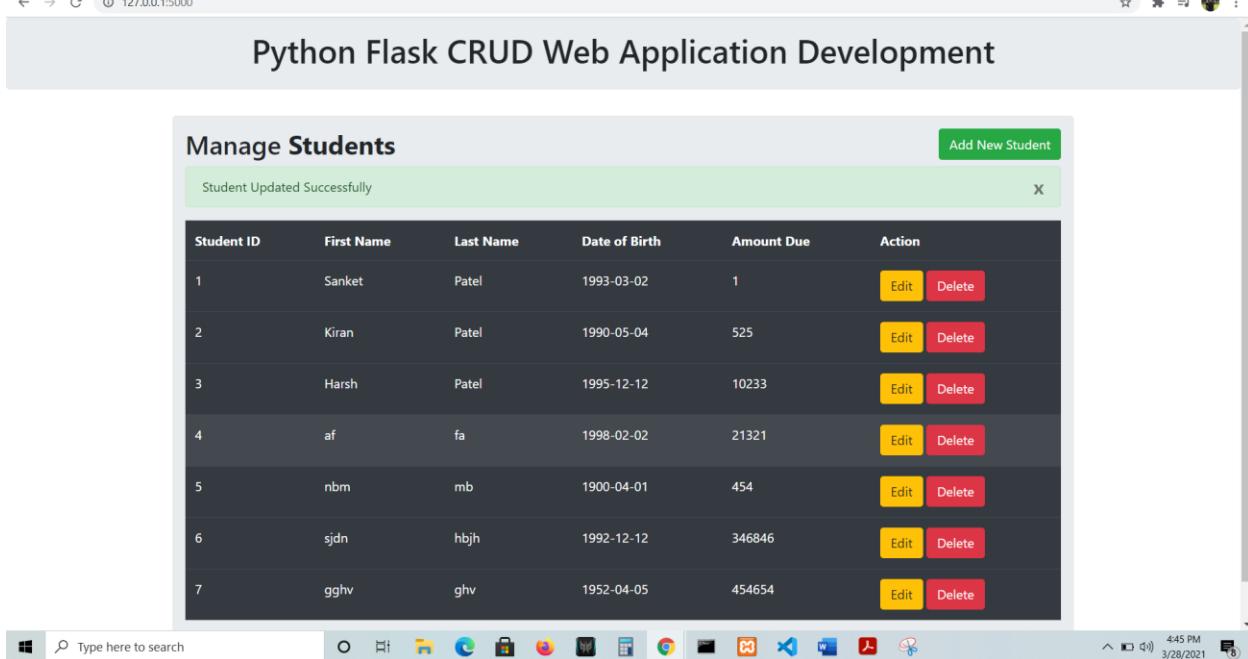
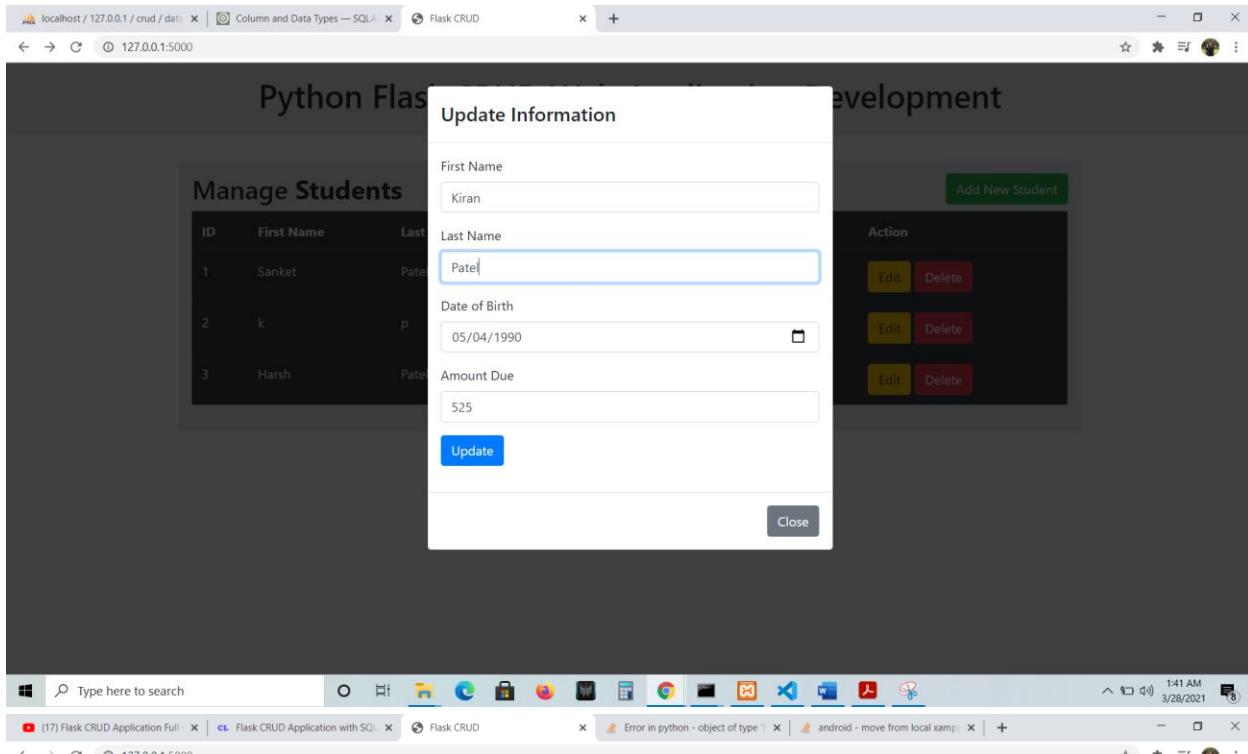
## Python Flask CRUD Web Application Development

ID	First Name	Last Name	Date of Birth	Amount Due	Action
1	Sanket	Patel	1993-03-02	10000	<button>Edit</button> <button>Delete</button>
2	k	p	1990-05-04	525	<button>Edit</button> <button>Delete</button>
3	Harsh	Patel	1995-12-12	10233	<button>Edit</button> <button>Delete</button>

Add New Student



Changing another name



Student is updated successfully.

We can see the changes in DB.

Options

			student_id	first_name	last_name	dob	amount_due	
<input type="checkbox"/>				1	Sanket	Patel	1993-03-02	1
<input type="checkbox"/>				2	Kiran	Patel	1990-05-04	525
<input type="checkbox"/>				3	Harsh	Patel	1995-12-12	10233
<input type="checkbox"/>				4	af	fa	1998-02-02	21321
<input type="checkbox"/>				5	nbm	mb	1900-04-01	454
<input type="checkbox"/>				6	sjdn	hbjh	1992-12-12	346846
<input type="checkbox"/>				7	gghv	ghv	1952-04-05	454654

↑     Check all    With selected:    Edit    Copy    Delete    Export

## Delete:

Flask CRUD

127.0.0.1:5000

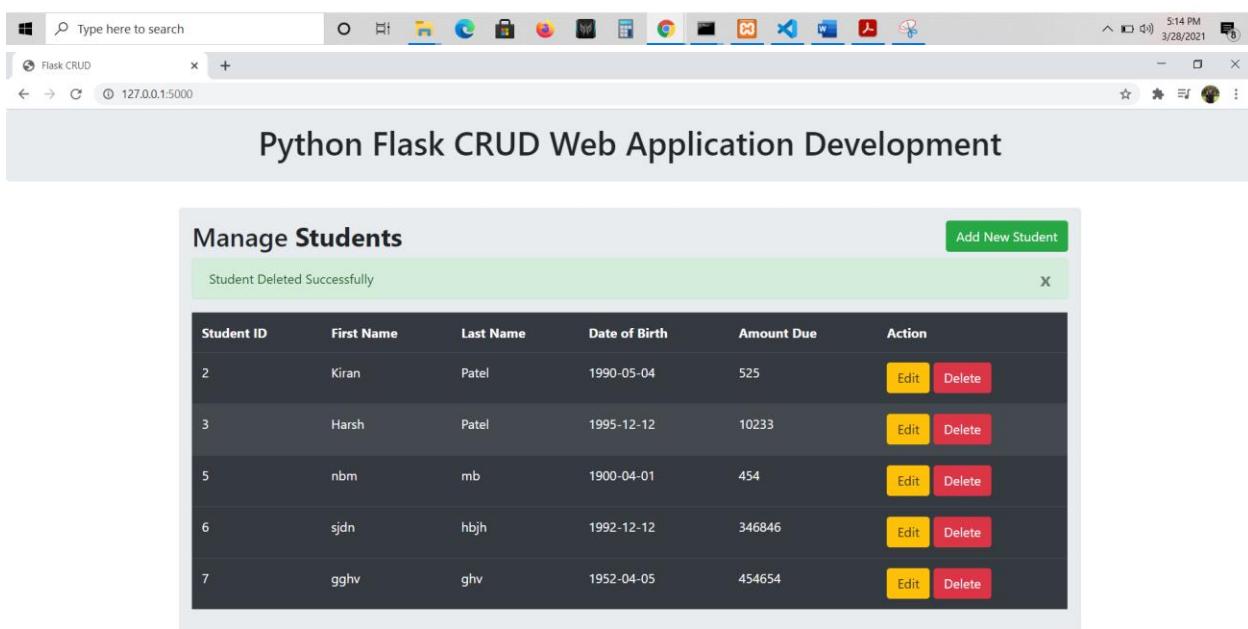
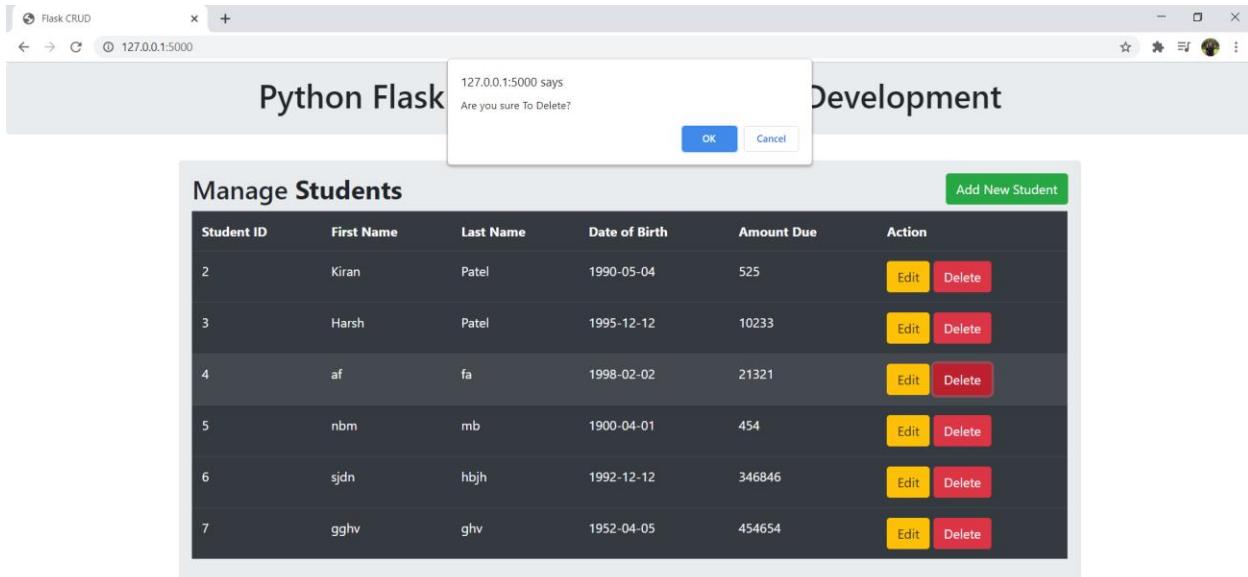
### Python Flask CRUD Web Application Development

Add New Student

Student ID	First Name	Last Name	Date of Birth	Amount Due	Action
2	Kiran	Patel	1990-05-04	525	
3	Harsh	Patel	1995-12-12	10233	
4	af	fa	1998-02-02	21321	
5	nbm	mb	1900-04-01	454	
6	sjdn	hbjh	1992-12-12	346846	
7	gghv	ghv	1952-04-05	454654	

127.0.0.1:5000/delete/4

			student_id	first_name	last_name	dob	amount_due	
<input type="checkbox"/>				2	Kiran	Patel	1990-05-04	525
<input type="checkbox"/>				3	Harsh	Patel	1995-12-12	10233
<input type="checkbox"/>				4	af	fa	1998-02-02	21321
<input type="checkbox"/>				5	nbm	mb	1900-04-01	454
<input type="checkbox"/>				6	sjdn	hbjh	1992-12-12	346846
<input type="checkbox"/>				7	gghv	ghv	1952-04-05	454654



Manage Students						
Student Deleted Successfully						X
Student ID	First Name	Last Name	Date of Birth	Amount Due	Action	
2	Kiran	Patel	1990-05-04	525	<button>Edit</button> <button>Delete</button>	
3	Harsh	Patel	1995-12-12	10233	<button>Edit</button> <button>Delete</button>	
5	nbm	mb	1900-04-01	454	<button>Edit</button> <button>Delete</button>	
6	sjdn	hbjh	1992-12-12	346846	<button>Edit</button> <button>Delete</button>	
7	gghv	ghv	1952-04-05	454654	<button>Edit</button> <button>Delete</button>	

We can see that student with name af is removed from database.

# Deployment:

## Using JawsDB as back end in cloud

The screenshot shows the Heroku dashboard for the application 'crud-app-students'. At the top, there are tabs for Overview, Resources, Deploy, Metrics, Activity, Access, and Settings. Under the Overview tab, it shows 'Free Dynos' and a 'Change Dyno Type' button. Below that, there's a section for 'Add-ons' with a search bar and a list item: 'JawsDB MySQL' which is 'Attached as JawsDB', 'Kitefin Shared', and 'Free'. The estimated monthly cost is listed as '\$0.00'. The browser's address bar shows 'dashboard.heroku.com/apps/crud-app-students/resources'. The status bar at the bottom indicates the time as 1:29 AM on 3/29/2021.

Created initial table using credentials, we can check that using a remote connection using MysqlWorkbench

The screenshot shows the MySQL Workbench interface. In the left sidebar, under the 'Schemas' section, the 'crud' schema is selected. Inside the 'crud' schema, a 'Tables' folder contains a single table named 'data'. The 'data' table has four columns: 'student\_id' (int AI PK), 'first\_name' (varchar(100)), 'last\_name' (varchar(100)), and 'amount\_due' (varchar(100)). The main pane displays the SQL query '1 \*' and the message 'Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.' Below the query pane, the 'Output' pane shows the results of a query, including timing information and execution details. The browser's address bar shows 'Type here to search' and the status bar indicates the time as 1:31 AM on 3/29/2021.

## Logs after pushing and deploying changes

```
Command Prompt

C:\Users\sanke\heroku logs --app crud-app-students
» Warning: heroku update available from 7.47.6 to 7.51.0.
2021-03-29T05:11:58.770396+00:00 app[web.1]: [2021-03-29 05:11:58,753] ERROR in app: Exception on / [GET]
2021-03-29T05:11:58.770344+00:00 app[web.1]: Traceback (most recent call last):
2021-03-29T05:11:58.770345+00:00 app[web.1]:   File "/app/.heroku/python/lib/python3.7/site-packages/sqlalchemy/util/_collections.py", line 1030, in __call__
2021-03-29T05:11:58.770356+00:00 app[web.1]:     return self.registry[key]
2021-03-29T05:11:58.770356+00:00 app[web.1]:   KeyError: 140262574612864
2021-03-29T05:11:58.770351+00:00 app[web.1]:
2021-03-29T05:11:58.770362+00:00 app[web.1]: During handling of the above exception, another exception occurred:
2021-03-29T05:11:58.770363+00:00 app[web.1]:
2021-03-29T05:11:58.770363+00:00 app[web.1]:   Traceback (most recent call last):
2021-03-29T05:11:58.770364+00:00 app[web.1]:     File "/app/.heroku/python/lib/python3.7/site-packages/flask/app.py", line 2446, in wsgi_app
2021-03-29T05:11:58.770365+00:00 app[web.1]:       response = self.full_dispatch_request()
2021-03-29T05:11:58.770366+00:00 app[web.1]:         rv = self.handle_user_exception(e)
2021-03-29T05:11:58.770366+00:00 app[web.1]:           raise exc_type, exc_value, tb
2021-03-29T05:11:58.770367+00:00 app[web.1]:             File "/app/.heroku/python/lib/python3.7/site-packages/flask/_compat.py", line 39, in reraise
2021-03-29T05:11:58.770367+00:00 app[web.1]:               raise value
2021-03-29T05:11:58.770367+00:00 app[web.1]:                 File "/app/.heroku/python/lib/python3.7/site-packages/flask/app.py", line 1949, in full_dispatch_request
2021-03-29T05:11:58.770368+00:00 app[web.1]:                   rv = self.dispatch_request()
2021-03-29T05:11:58.770368+00:00 app[web.1]:                     File "/app/.heroku/python/lib/python3.7/site-packages/flask/app.py", line 1935, in dispatch_request
2021-03-29T05:11:58.770368+00:00 app[web.1]:                       return self.view_functions[rule.endpoint](**req.view_args)
2021-03-29T05:11:58.770369+00:00 app[web.1]:                         File "/app/app.py", line 38, in Index
2021-03-29T05:11:58.770369+00:00 app[web.1]:                           all_data = Data.query.all()
2021-03-29T05:11:58.770369+00:00 app[web.1]:                             File "/app/.heroku/python/lib/python3.7/site-packages/flask_sqlalchemy/__init__.py", line 519, in __get__
2021-03-29T05:11:58.770370+00:00 app[web.1]:                               return type.query_class(mapper, session=self.sa.session())
2021-03-29T05:11:58.770370+00:00 app[web.1]:                                 File "/app/.heroku/python/lib/python3.7/site-packages/sqlalchemy/orm/scoping.py", line 78, in __call__
2021-03-29T05:11:58.770371+00:00 app[web.1]:                                   return self.registry._setdefault(key, self.createfunc())
2021-03-29T05:11:58.770371+00:00 app[web.1]:                                     File "/app/.heroku/python/lib/python3.7/site-packages/sqlalchemy/util/_collections.py", line 1032, in __call__
2021-03-29T05:11:58.770371+00:00 app[web.1]:                                       return self.registry.setdefault(key, self.createfunc())
2021-03-29T05:11:58.770372+00:00 app[web.1]:                                         File "/app/.heroku/python/lib/python3.7/site-packages/sqlalchemy/orm/session.py", line 3254, in __call__
2021-03-29T05:11:58.770372+00:00 app[web.1]:                                           return self.class_._(local_kw)
2021-03-29T05:11:58.770372+00:00 app[web.1]:                                             File "/app/.heroku/python/lib/python3.7/site-packages/flask_sqlalchemy/__init__.py", line 138, in __init__
2021-03-29T05:11:58.770372+00:00 app[web.1]:                                               bind = options.pop('bind', None) or db.engine
2021-03-29T05:11:58.770373+00:00 app[web.1]:                                                 File "/app/.heroku/python/lib/python3.7/site-packages/flask_sqlalchemy/__init__.py", line 937, in engine
2021-03-29T05:11:58.770373+00:00 app[web.1]:                                                   return self.get_engine()
2021-03-29T05:11:58.770373+00:00 app[web.1]:                                                     File "/app/.heroku/python/lib/python3.7/site-packages/flask_sqlalchemy/__init__.py", line 956, in get_engine
2021-03-29T05:11:58.770374+00:00 app[web.1]:                                                       return connector.get_engine()
2021-03-29T05:11:58.770374+00:00 app[web.1]:                                                         File "/app/.heroku/python/lib/python3.7/site-packages/flask_sqlalchemy/__init__.py", line 561, in get_engine
AppleWebKit/537.36 (KHTML, like Gecko) Chrome/89.0.4389.90 Safari/537.36
```

```
Command Prompt
2021-03-29T05:11:58.770375+00:00 app[web.1]: return strategy.create(*args, **kwargs)
2021-03-29T05:11:58.770376+00:00 app[web.1]: File "/app/.heroku/python/lib/python3.7/site-packages/sqlalchemy/engine-strategies.py", line 87, in create
2021-03-29T05:11:58.770376+00:00 app[web.1]: dbapi = dialect_cls.dbapi(**dbapi_args)
2021-03-29T05:11:58.770376+00:00 app[web.1]: File "/app/.heroku/python/lib/python3.7/site-packages/sqlalchemy/dialects/mysql/pymysql.py", line 62, in dbapi
2021-03-29T05:11:58.770376+00:00 app[web.1]: return __import__(_'pymysql')
2021-03-29T05:11:58.770377+00:00 app[web.1]: ModuleNotFoundError: No module named 'pymysql'
2021-03-29T05:11:58.822913+00:00 heroku[router]: at=info method=GET path="/" host=crud-app-students.herokuapp.com request_id=e6576366-5d43-488c-9cc1-2c445e8386b3 fwd="99.23.2764ms" status=200 bytes=455 protocol=https
2021-03-29T05:11:58.825134+00:00 app[web.1]: 10.69.178.208 - - [29/Mar/2021:05:11:58 +0000] "GET / HTTP/1.1" 200 290 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/89.0.4389.90 Safari/537.36"
2021-03-29T05:11:59.239658+00:00 heroku[router]: at=info method=GET path="/favicon.ico" host=crud-app-students.herokuapp.com request_id=291f818a-31ca-4dd4-8b62-57f9415e30d5 t=0ms service=6ms status=404 bytes=385 protocol=https
2021-03-29T05:11:59.241549+00:00 app[web.1]: 10.69.178.208 - - [29/Mar/2021:05:11:59 +0000] "GET /favicon.ico HTTP/1.1" 404 232 "https://crud-app-students.herokuapp.com/" "AppleWebKit/537.36 (KHTML, like Gecko) Chrome/89.0.4389.90 Safari/537.36"
2021-03-29T05:12:05.36 000000+00:00 app[api]: Build started by user sanket23119@gmail.com
2021-03-29T05:12:07.533690+00:00 app[api]: Deploy 0b1biced by user sanket23119@gmail.com
2021-03-29T05:12:07.533690+00:00 app[api]: Release 26.07 created by user sanket23119@gmail.com
2021-03-29T05:12:08.747829+00:00 heroku[web.1]: Restarting
2021-03-29T05:12:08.764693+00:00 heroku[web.1]: State changed from up to starting
2021-03-29T05:12:08.285198+00:00 heroku[web.1]: Stopping all processes with SIGTERM
2021-03-29T05:12:08.143352+00:00 app[web.1]: [2021-03-29 05:26:10 +0000] [9] [INFO] Worker exiting (pid: 9)
2021-03-29T05:12:08.147336+00:00 app[web.1]: [2021-03-29 05:26:10 +0000] [4] [INFO] Handling signal: term
2021-03-29T05:12:08.145564+00:00 app[web.1]: [2021-03-29 05:26:10 +0000] [10] [INFO] Worker exiting (pid: 10)
2021-03-29T05:12:08.158158+00:00 app[web.1]: [2021-03-29 05:26:10 +0000] [4] [INFO] Shutting down: Master
2021-03-29T05:12:08.174285+00:00 heroku[web.1]: Process exited with status 0
2021-03-29T05:12:08.249595+00:00 heroku[web.1]: Starting process with command `gunicorn app:app`
2021-03-29T05:12:17.000000+00:00 app[api]: Build succeeded
2021-03-29T05:12:17.43165+00:00 app[web.1]: [2021-03-29 05:26:17 +0000] [4] [INFO] Starting gunicorn 19.9.0
2021-03-29T05:12:17.744131+00:00 app[web.1]: [2021-03-29 05:26:17 +0000] [4] [INFO] Listening at: http://0.0.0.0:49657 (4)
2021-03-29T05:12:17.744294+00:00 app[web.1]: [2021-03-29 05:26:17 +0000] [4] [INFO] Using worker: sync
2021-03-29T05:12:17.758482+00:00 app[web.1]: [2021-03-29 05:26:17 +0000] [9] [INFO] Booting worker with pid: 9
2021-03-29T05:12:17.776859+00:00 app[web.1]: [2021-03-29 05:26:17 +0000] [10] [INFO] Booting worker with pid: 10
2021-03-29T05:12:18.732873+00:00 heroku[web.1]: State changed from starting to up
2021-03-29T05:12:21.339998+00:00 heroku[router]: at=info method=GET path="/" host=crud-app-students.herokuapp.com request_id=d42441451-994d-44fd-944c-88b91f1a7e7d fwd="99.23.2764ms" status=200 bytes=455 protocol=https
2021-03-29T05:12:21.342048+00:00 app[web.1]: 10.31.92.118 - - [29/Mar/2021:05:26:21 +0000] "GET / HTTP/1.1" 200 9577 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/89.0.4389.90 Safari/537.36"
2021-03-29T05:12:26.55.25.288146+00:00 heroku[router]: at=info method=POST path="/insert" host=crud-app-students.herokuapp.com request_id=lalaee7c2-98b5-441e-9e11-e0e9dbbb5c50 fwd="99.23.2764ms" status=302 bytes=601 protocol=https
2021-03-29T05:12:26.55.31.531433+00:00 app[web.1]: 10.31.92.118 - - [29/Mar/2021:05:26:53 +0000] "POST /insert HTTP/1.1" 302 209 "https://crud-app-students.herokuapp.com/" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/89.0.4389.90 Safari/537.36"
AnonWebkit/537.36 (KHTML, like Gecko) Chrome/89.0.4389.90 Safari/537.36"
```

```
2021-03-29T05:26:17.776859+00:00 app[web.1]: [2021-03-29 05:26:17 +0000] [10] [INFO] Booting worker with pid: 10
2021-03-29T05:26:18.732873+00:00 heroku[web.1]: State changed from starting to up
2021-03-29T05:26:19.539998+00:00 heroku[router]: at=info method=GET path="/" host=crud-app-students.herokuapp.com request_id=42441451-994d-44fd-944c-88b91f1a7e7d fwd="99.23.93.93" status:200 bytes=9739 protocol=https
2021-03-29T05:26:21.342040+00:00 app[web.1]: 10.31.92.118 - - [29/Mar/2021:05:26:21 +0000] "GET / HTTP/1.1" 200 9577 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/53.4.389.90 Safari/537.36"
2021-03-29T05:26:53.288146+00:00 heroku[router]: at=info method=POST path="/insert" host=crud-app-students.herokuapp.com request_id=1a1ae7c2-98b5-441e-9e11-e0e9db5bbc50 fwd=service:501ms status:302 bytes=601 protocol=https
2021-03-29T05:26:53.311343+00:00 app[web.1]: 10.31.92.118 - - [29/Mar/2021:05:26:53 +0000] "POST /insert HTTP/1.1" 302 209 "https://crud-app-students.herokuapp.com/" "Mozilla/5.0 (KHTML, like Gecko) Chrome/89.0.4389.90 Safari/537.36"
2021-03-29T05:26:53.504129+00:00 app[web.1]: 10.31.92.118 - - [29/Mar/2021:05:26:53 +0000] "GET / HTTP/1.1" 200 12400 "https://crud-app-students.herokuapp.com/" "Mozilla/5.0 (KHTML, like Gecko) Chrome/89.0.4389.90 Safari/537.36"
2021-03-29T05:26:53.545599+00:00 heroku[router]: at=info method=GET path="/" host=crud-app-students.herokuapp.com request_id=45ff989c-7453-4304-b4ad-7421941b4a1b fwd="99.23.124.0" status:200 bytes=12643 protocol=https
2021-03-29T05:27:01.183305+00:00 app[web.1]: 10.31.92.118 - - [29/Mar/2021:05:27:01 +0000] "POST /update HTTP/1.1" 302 209 "https://crud-app-students.herokuapp.com/" "Mozilla/5.0 (KHTML, like Gecko) Chrome/89.0.4389.90 Safari/537.36"
2021-03-29T05:27:01.189649+00:00 heroku[router]: at=info method=POST path="/update" host=crud-app-students.herokuapp.com request_id=603ea33f-5d13-4c99-849c-0f968c6c0c35 fwd=service:50ms status:302 bytes=608 protocol=https
2021-03-29T05:27:01.21.248785+00:00 app[web.1]: 10.31.92.118 - - [29/Mar/2021:05:27:01 +0000] "GET / HTTP/1.1" 200 12397 "https://crud-app-students.herokuapp.com/" "Mozilla/5.0 (KHTML, like Gecko) Chrome/89.0.4389.90 Safari/537.36"
2021-03-29T05:27:01.25.257596+00:00 heroku[router]: at=info method=GET path="/" host=crud-app-students.herokuapp.com request_id=cfc70bcf-90ae-45d3-93f7-e02046e2863f fwd="99.23.17ms" status:200 bytes=12648 protocol=https
2021-03-29T05:27:02.182566+00:00 app[web.1]: [2021-03-29 05:27:02,180] ERROR in app: Exception on /update [GET]
2021-03-29T05:27:02.182576+00:00 app[web.1]: Traceback (most recent call last):
2021-03-29T05:27:02.182577+00:00 app[web.1]:   File "/app/.heroku/python/lib/python3.7/site-packages/flask/app.py", line 2446, in wsgi_app
2021-03-29T05:27:02.182577+00:00 app[web.1]:     response = self.full_dispatch_request()
2021-03-29T05:27:02.182582+00:00 app[web.1]:     File "/app/.heroku/python/lib/python3.7/site-packages/flask/app.py", line 1952, in full_dispatch_request
2021-03-29T05:27:02.182582+00:00 app[web.1]:       return self.finalize_request(rv)
2021-03-29T05:27:02.182583+00:00 app[web.1]:     File "/app/.heroku/python/lib/python3.7/site-packages/flask/app.py", line 1967, in finalize_request
2021-03-29T05:27:02.182583+00:00 app[web.1]:       response = self.make_response(rv)
2021-03-29T05:27:02.182584+00:00 app[web.1]:     File "/app/.heroku/python/lib/python3.7/site-packages/flask/app.py", line 2097, in make_response
2021-03-29T05:27:02.182586+00:00 app[web.1]:       TypeError: The view function did not return a valid response. The function either returned None or ended without a return statement
2021-03-29T05:27:02.308945+00:00 app[web.1]: 10.61.245.89 - - [29/Mar/2021:05:27:02 +0000] "GET /update HTTP/1.1" 500 298 "https://www.google.com/" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/53.4.389.90 Safari/537.36"
2021-03-29T05:27:02.313885+00:00 heroku[router]: at=info method=GET path="/update" host=crud-app-students.herokuapp.com request_id=976e565e-4e53-46d2-8393-42b1eba00f0 fwd=services:172ms status:500 bytes=455 protocol=https
2021-03-29T05:27:16.589827+00:00 app[web.1]: 10.31.92.118 - - [29/Mar/2021:05:27:16 +0000] "GET /delete/3 HTTP/1.1" 308 305 "https://crud-app-students.herokuapp.com/" "Mozilla/5.0 (KHTML, like Gecko) Chrome/89.0.4389.90 Safari/537.36"
2021-03-29T05:27:16.587923+00:00 heroku[router]: at=info method=GET path="/delete/3" host=crud-app-students.herokuapp.com request_id=9ee6f95-2a4f-48da-aad6-53caf6357045 fwd=services:26ms status:308 bytes=543 protocol=https
appleWebKit/537.36 (KHTML, like Gecko) Chrome/89.0.4389.90 Safari/537.36"
```

```
[1] Command Prompt
2021-03-29T05:26:53.313143+00:00 app[web.1]: 10.31.92.118 - - [29/Mar/2021:05:26:53 +0000] "POST /insert HTTP/1.1" 302 209 "https://crud-app-students.herokuapp.com/" "Mozilla/5.0 Webkit/537.36 (KHTML, like Gecko) Chrome/89.0.4389.90 Safari/537.36"
2021-03-29T05:26:53.50129+00:00 app[web.1]: 10.31.92.118 - - [29/Mar/2021:05:26:53 +0000] "GET / HTTP/1.1" 200 12400 "https://crud-app-students.herokuapp.com/" "Mozilla/5.0 Webkit/537.36 (KHTML, like Gecko) Chrome/89.0.4389.90 Safari/537.36"
2021-03-29T05:26:53.545999+00:00 heroku[router]: at=info method=GET path="/" host=crud-app-students.herokuapp.com request_id=45ff989c-7453-4304-b4ad-7421941b4a1b fwd="99.23.124.20" status=200 bytes=12643 protocol=https
2021-03-29T05:27:01.183395+00:00 app[web.1]: 10.31.92.118 - - [29/Mar/2021:05:27:01 +0000] "POST /update HTTP/1.1" 302 209 "https://crud-app-students.herokuapp.com/" "Mozilla/5.0 Webkit/537.36 (KHTML, like Gecko) Chrome/89.0.4389.90 Safari/537.36"
2021-03-29T05:27:01.189649+00:00 heroku[router]: at=info method=POST path="/update" host=crud-app-students.herokuapp.com request_id=603ea33f-5d13-4c99-849c-0f368c6c0c35 fwd="99.23.124.20" status=303 bytes=600 protocol=https
2021-03-29T05:27:01.21.248785+00:00 app[web.1]: 10.31.92.118 - - [29/Mar/2021:05:27:01 +0000] "GET / HTTP/1.1" 200 12397 "https://crud-app-students.herokuapp.com/" "Mozilla/5.0 Webkit/537.36 (KHTML, like Gecko) Chrome/89.0.4389.90 Safari/537.36"
2021-03-29T05:27:01.255796+00:00 heroku[router]: at=info method=GET path="/" host=crud-app-students.herokuapp.com request_id=cfc70bcf-90ae-45d3-93f7-e02046e2863f fwd="99.23.124.20" status=200 bytes=12640 protocol=https
2021-03-29T05:27:02.182566+00:00 app[web.1]: [2021-03-29 05:27:02,180] ERROR in app: Exception on /update [GET]
2021-03-29T05:27:02.182576+00:00 app[web.1]: Traceback (most recent call last):
2021-03-29T05:27:02.182577+00:00 app[web.1]:   File "/app/.heroku/python/lib/python3.7/site-packages/flask/app.py", line 2446, in wsgi_app
2021-03-29T05:27:02.182577+00:00 app[web.1]:     response = self.full_dispatch_request()
2021-03-29T05:27:02.182582+00:00 app[web.1]:     File "/app/.heroku/python/lib/python3.7/site-packages/flask/app.py", line 1952, in full_dispatch_request
2021-03-29T05:27:02.182582+00:00 app[web.1]:       return self.finalize_request(r)
2021-03-29T05:27:02.182583+00:00 app[web.1]:     File "/app/.heroku/python/lib/python3.7/site-packages/flask/app.py", line 1967, in finalize_request
2021-03-29T05:27:02.182583+00:00 app[web.1]:       response = self.make_response(r)
2021-03-29T05:27:02.182584+00:00 app[web.1]:     File "/app/.heroku/python/lib/python3.7/site-packages/flask/app.py", line 2097, in make_response
2021-03-29T05:27:02.182584+00:00 app[web.1]:       "The view function did not return a valid response. The"
2021-03-29T05:27:02.182586+00:00 app[web.1]: TypeError: The view function did not return a valid response. The function either returned None or ended without a return state
2021-03-29T05:27:02.308945+00:00 app[web.1]: 10.31.216.245.89 - - [29/Mar/2021:05:27:02 +0000] "GET /update HTTP/1.1" 500 290 "https://www.google.com/" "Mozilla/5.0 (Windows NT KHTML, like Gecko) Chrome/84.0.4147.135 Safari/537.36"
2021-03-29T05:27:19.313085+00:00 heroku[router]: at=info method=GET path="/update" host=crud-app-students.herokuapp.com request_id=976e565e-4e53-46d2-8393-42b1eba000f0 fwd="99.23.124.20" status=500 bytes=455 protocol=https
2021-03-29T05:27:16.589827+00:00 app[web.1]: 10.31.92.118 - - [29/Mar/2021:05:27:16 +0000] "GET /delete/3 HTTP/1.1" 308 305 "https://crud-app-students.herokuapp.com/" "Mozilla/5.0 Webkit/537.36 (KHTML, like Gecko) Chrome/89.0.4389.90 Safari/537.36"
2021-03-29T05:27:16.587923+00:00 heroku[router]: at=info method=GET path="/delete/3" host=crud-app-students.herokuapp.com request_id=9ee6f95-2a4f-48da-a6d-53caf6357045 fwd="99.23.124.20" status=308 bytes=543 protocol=https
2021-03-29T05:27:16.668440+00:00 app[web.1]: 10.31.92.118 - - [29/Mar/2021:05:27:16 +0000] "GET /delete/3 HTTP/1.1" 302 209 "https://crud-app-students.herokuapp.com/" "Mozilla/5.0 Webkit/537.36 (KHTML, like Gecko) Chrome/89.0.4389.90 Safari/537.36"
2021-03-29T05:27:16.577763+00:00 heroku[router]: at=info method=GET path="/delete/3" host=crud-app-students.herokuapp.com request_id=a2ddf2e3-052b-4b9c-aa09-05e1fd5d6ca9 fwd="99.23.124.20" status=200 bytes=600 protocol=https
2021-03-29T05:27:16.786683+00:00 app[web.1]: 10.31.92.118 - - [29/Mar/2021:05:27:16 +0000] "GET / HTTP/1.1" 200 9986 "https://crud-app-students.herokuapp.com/" "Mozilla/5.0 Webkit/537.36 (KHTML, like Gecko) Chrome/89.0.4389.90 Safari/537.36"
2021-03-29T05:27:16.793330+00:00 heroku[router]: at=info method=GET path="/" host=crud-app-students.herokuapp.com request_id=b5eb958c-8aa8-4f16-b727-781597784de7 fwd="99.23.124.20" status=200 bytes=1028 protocol=https
2021-03-29T05:27:16.800000+00:00 heroku[router]: at=info method=GET path="/favicon.ico" host=crud-app-students.herokuapp.com request_id=976e565e-4e53-46d2-8393-42b1eba000f0 fwd="99.23.124.20" status=200 bytes=0 protocol=https
```

# Build is successful

Student Updated Successfully

Student ID	First Name	Last Name	Date of Birth	Amount Due	Action
1	Sanket	Patel	1993-02-03	1000	<button>Edit</button> <button>Delete</button>
2	Shir	Pat	1924-12-14	15000	<button>Edit</button> <button>Delete</button>

**Github Link:** <https://github.com/Sanket2311/Python-CRUD-app/tree/main>

**App link:** <https://crud-app-students.herokuapp.com/>

## Work Division & Planning:

26/03/2021	Creating HTMLs
27/03/2021	Creating app for ADD
28/03/2021	Creating app for Read, Update, Delete
29/03/2021	Documentation

