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CLOUD AND API DEPLOYMENT

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This document contains the detailed report of all the steps carried out in order to understand how to realize API Deployment on Heroku cloud platform.

I will use Google Chrome web browser, github repository, and python programming language as well as its different packages and libraries.

The files on <https://github.com/Vince689/Heroku-emp-salaryprediction.git> contain the model that I need to deploy an APP on Heroku.

The following contents will be found in this document: APP Deployment on Hereku by GitHub repo.

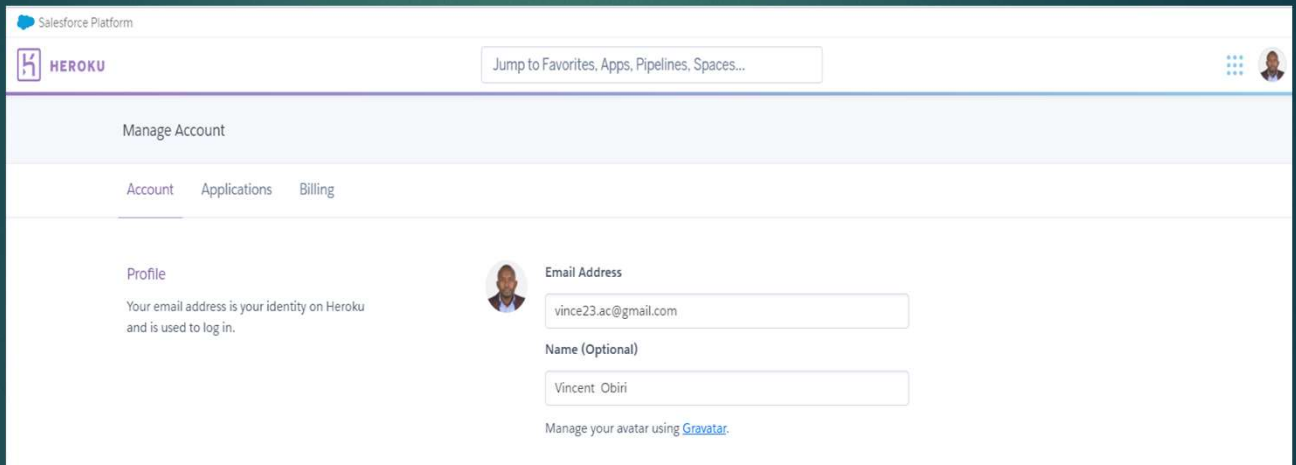
II. API DEPLOYMENT ON HEROKU BY GITHUB

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Heroku integrates with GitHub to facilitate the deployment of code stored in GitHub to applications running on Heroku. When GitHub integration is configured for a Heroku app, Heroku can automatically build and release (if the build is successful) all pushes to the specified GitHub repo.

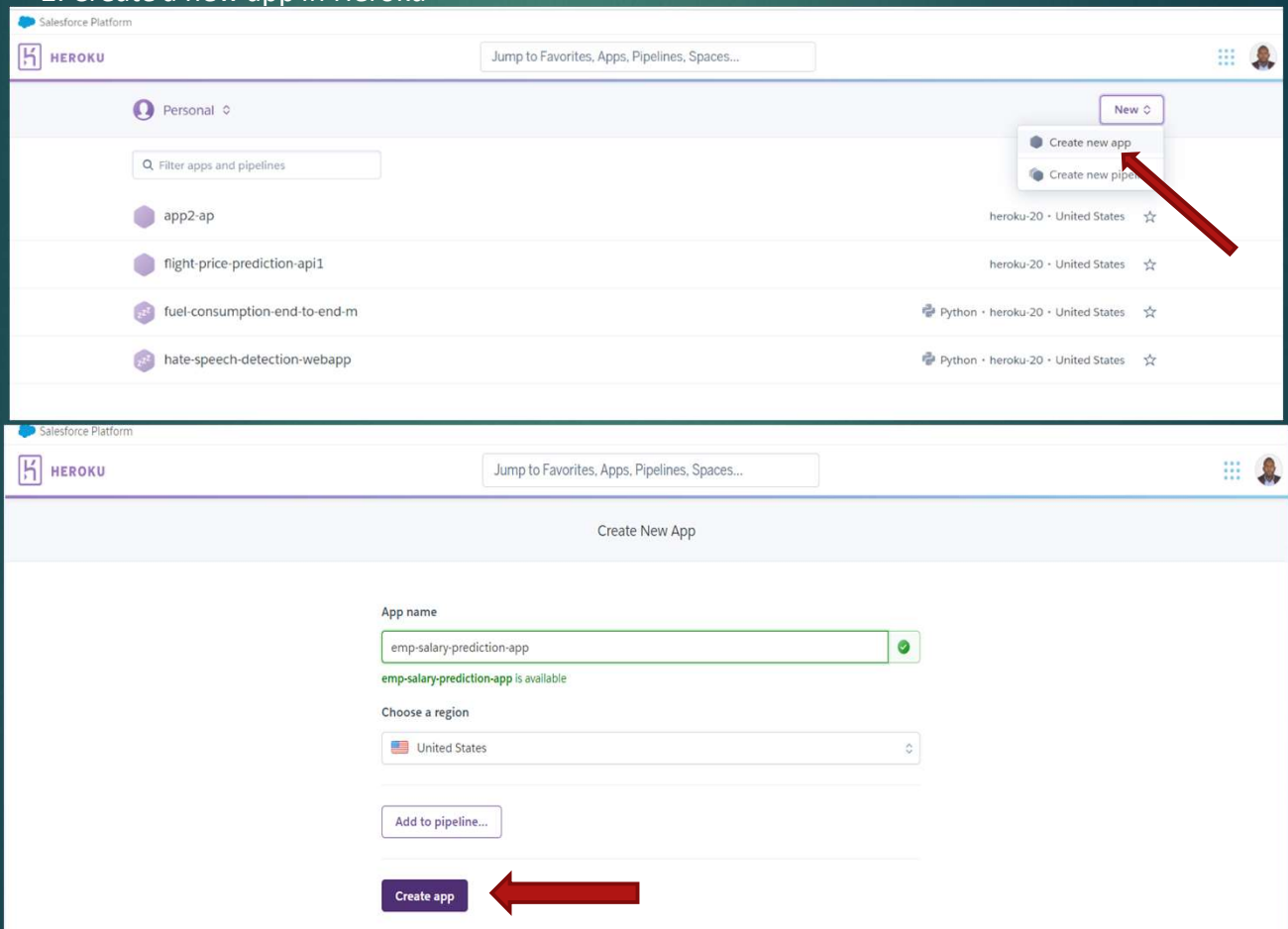
In this segment, I will use Google Chrome, Github repository

1. Use <http://www.heroku.com> and create a Heroku account and login.



The screenshot shows the Heroku account setup page. The top navigation bar includes the Heroku logo and a search bar. Below the navigation bar, there are tabs for 'Manage Account', 'Account', 'Applications', and 'Billing'. The 'Account' tab is selected, showing a profile section with a profile picture, email address (vince23.ac@gmail.com), and name (Vincent Obiri). There is a link to 'Manage your avatar using Gravatar'.

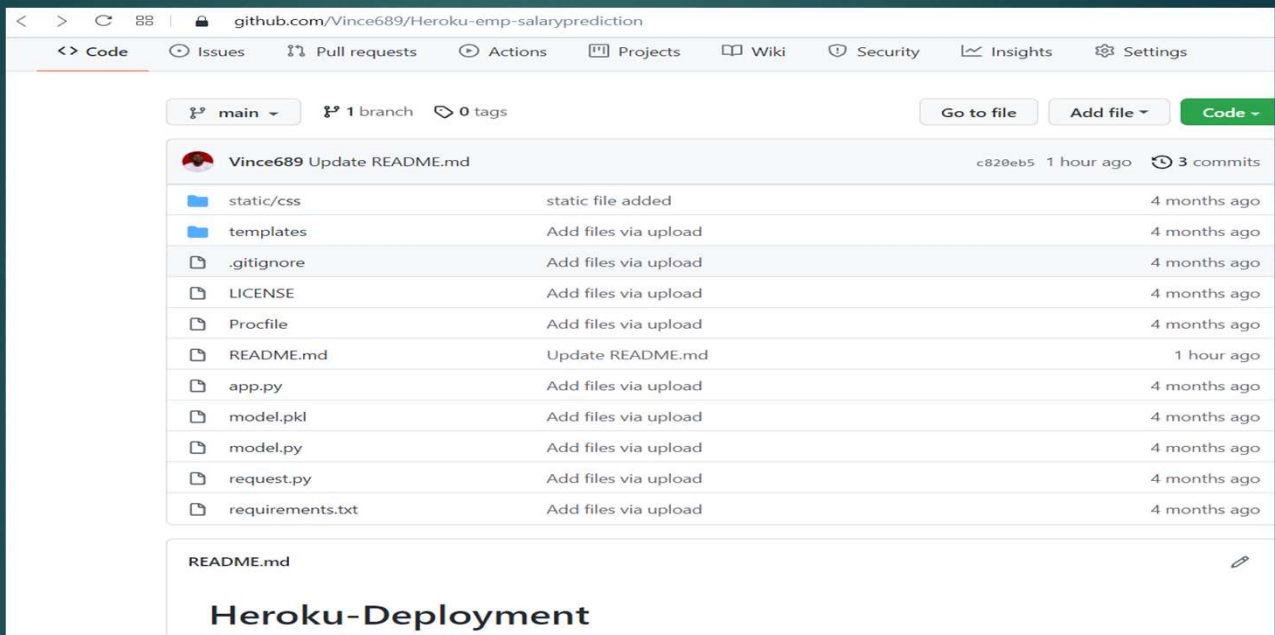
2. Create a new app in Heroku



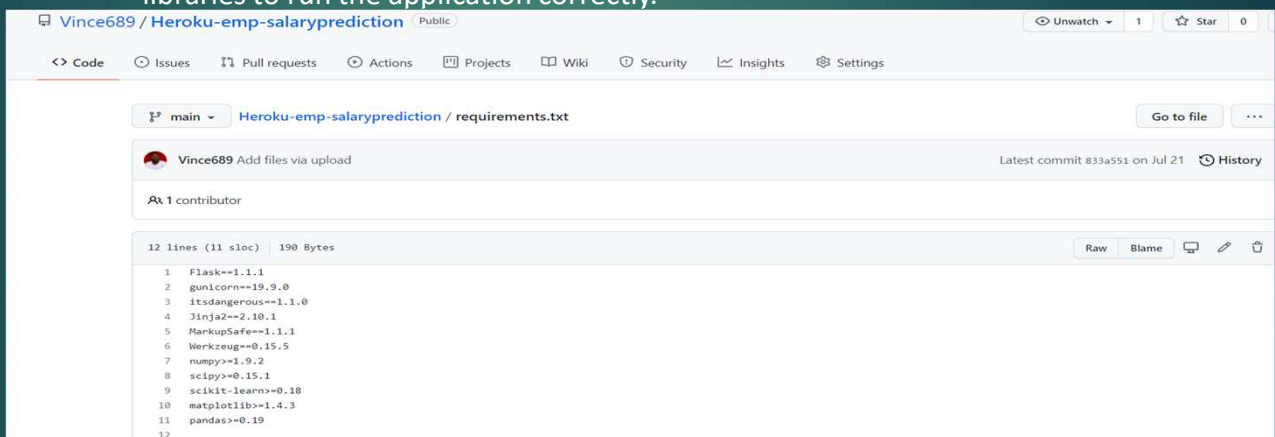
The screenshot shows the Heroku 'Create New App' page. The top navigation bar includes the Heroku logo and a search bar. Below the navigation bar, there are tabs for 'Personal' and 'New'. The 'New' tab is selected, showing a dropdown menu with options 'Create new app' and 'Create new pipeline'. A red arrow points to the 'Create new app' option. Below the dropdown menu, there is a list of existing apps with columns for app name, region, and status. The 'Create New App' form is visible, with fields for 'App name' (emp-salary-prediction-app), 'Choose a region' (United States), and a 'Create app' button. A red arrow points to the 'Create app' button.

3. To keep on the next step, we need to have a GitHub repository with the app that contain our model.

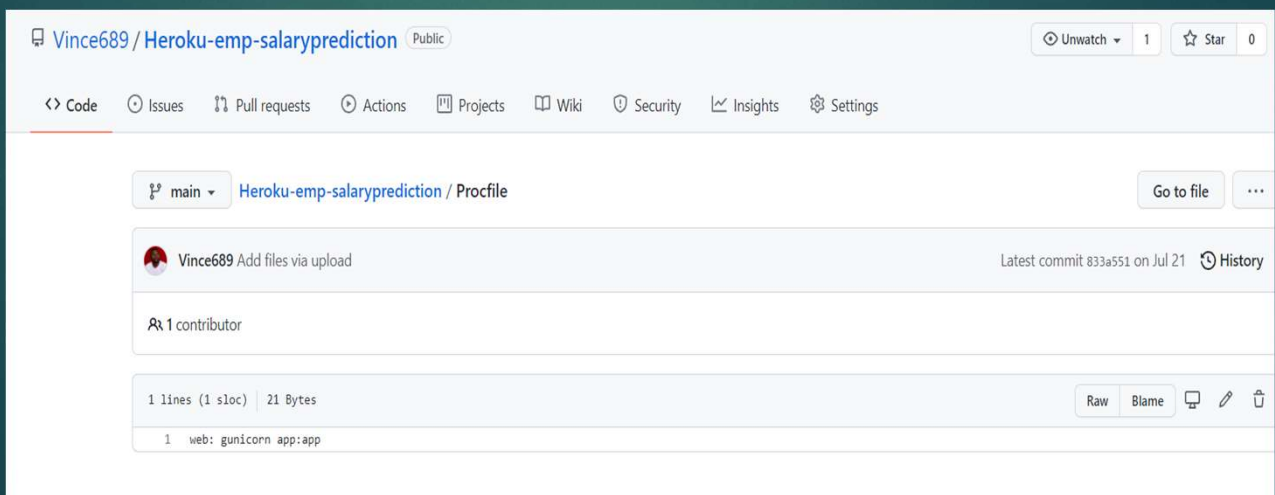
1. This is the content of my repo that contain my app



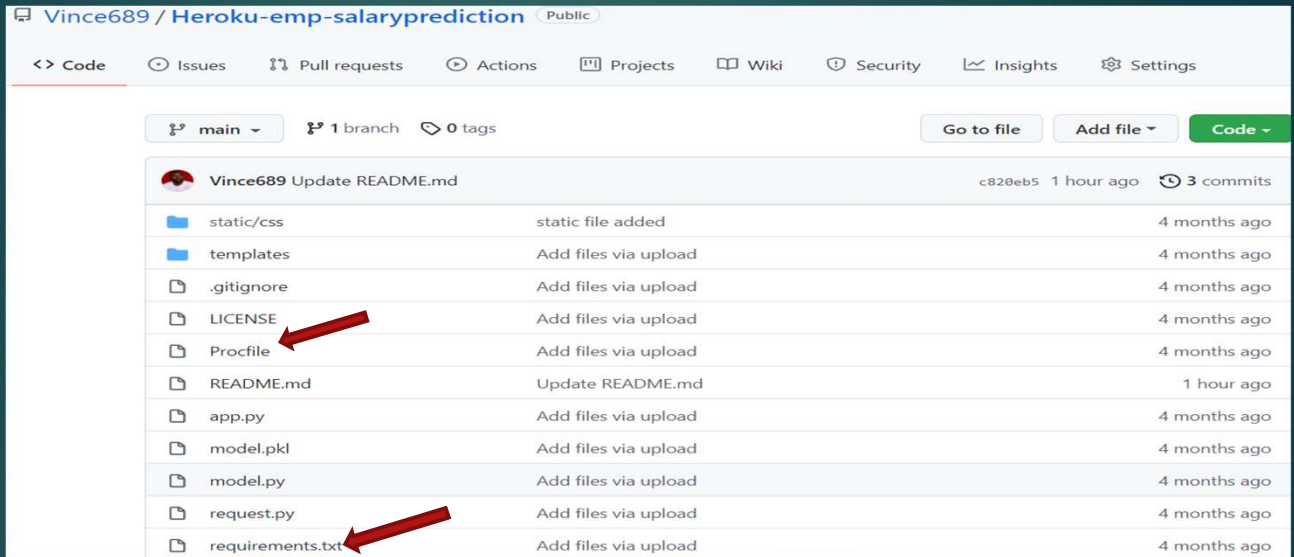
3.2. Create a new repository and save all folder and file necessary to run the app and as well we need to add two files. You must install all the dependencies necessary in the file called "requirements.txt", it will tell heroku that this project will require all these libraries to run the application correctly.



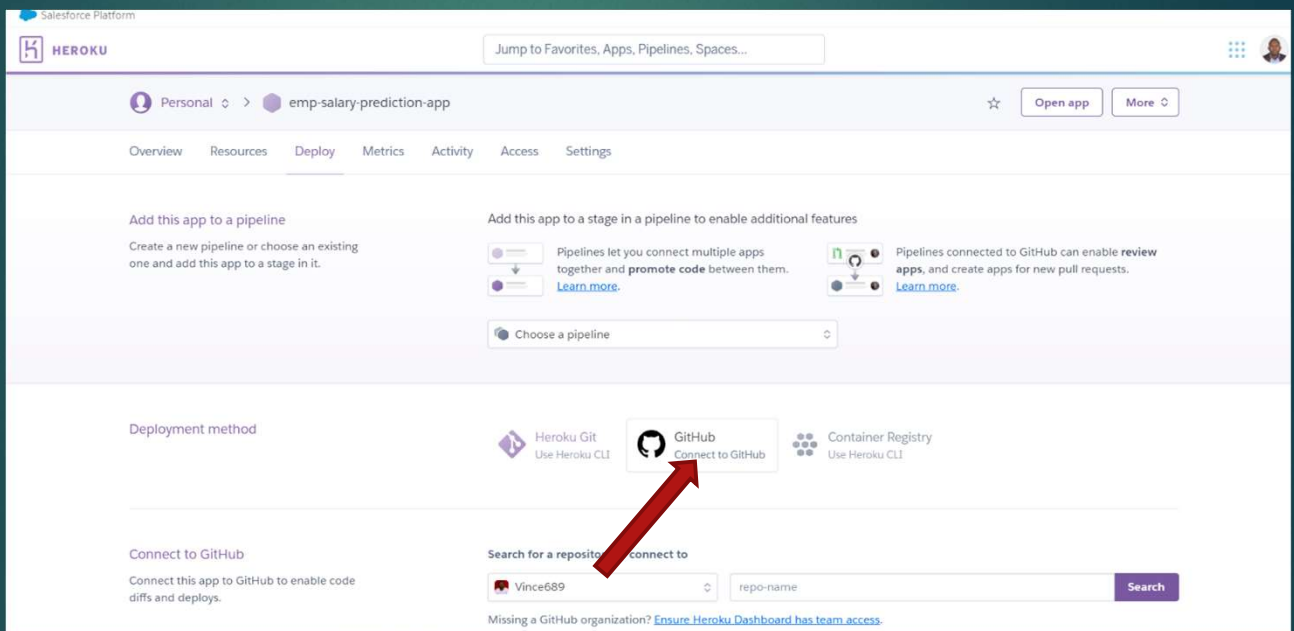
- Heroku requires "Procfile" to be present in the root directory of your application. It will tell Heroku how to run the application. Make sure it is a simple file with no extension.



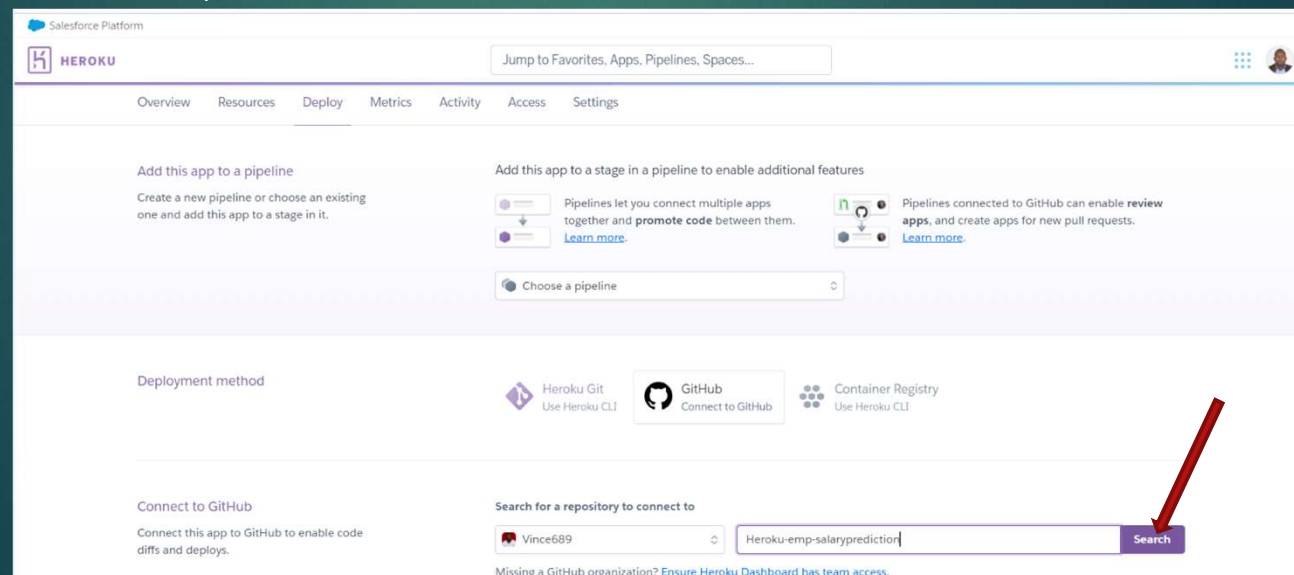
3.3. Make sure the Procfile file and the requirements.txt are present in the root directory of your application.



4. In Heroku Connect to GitHub



5. Write the repo-name and Search



6. Click in Enable Automatic Deploys

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Salesforce Platform

HEROKU

Jump to Favorites, Apps, Pipelines, Spaces...

Deployment method

- Heroku Git Use Heroku CLI
- GitHub **Connected**
- Container Registry Use Heroku CLI

App connected to GitHub

Code diffs, manual and auto deploys are available for this app.

Connected to [Vince689/Heroku-emp-salaryprediction](#) by [Vince689](#) [Disconnect...](#)

Releases in the [activity feed](#) link to GitHub to view commit diffs

Automatic deploys

Enables a chosen branch to be automatically deployed to this app.

You can now change your main deploy branch from "master" to "main" for both manual and automatic deploys, please follow the instructions [here](#).

Enable automatic deploys from GitHub

Every push to the branch you specify here will deploy a new version of this app. **Deploys happen automatically**; be sure that this branch is always in a deployable state and any tests have passed before you push. [Learn more](#).

Choose a branch to deploy

☐ Wait for CI to pass before deploy

Only enable this option if you have a Continuous Integration service configured on your repo.

Enable Automatic Deploys

7. Click on Deploy Branch

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Automatic deploys from **main**

Automatic deploys

Enables a chosen branch to be automatically deployed to this app.

You can now change your main deploy branch from "master" to "main" for both manual and automatic deploys, please follow the instructions [here](#).

☒ Automatic deploys from **main** are enabled

Every push to **main** will deploy a new version of this app. **Deploys happen automatically**; be sure that this branch in GitHub is always in a deployable state and any tests have passed before you push. [Learn more](#).

☐ Wait for CI to pass before deploy

Only enable this option if you have a Continuous Integration service configured on your repo.

[Disable Automatic Deploys](#)

Manual deploy

Deploy the current state of a branch to this app.

Deploy a GitHub branch

This will deploy the current state of the branch you specify below. [Learn more](#).

Choose a branch to deploy

Deploy Branch

8. The app starts to build then Heroku shows the link to launch the app

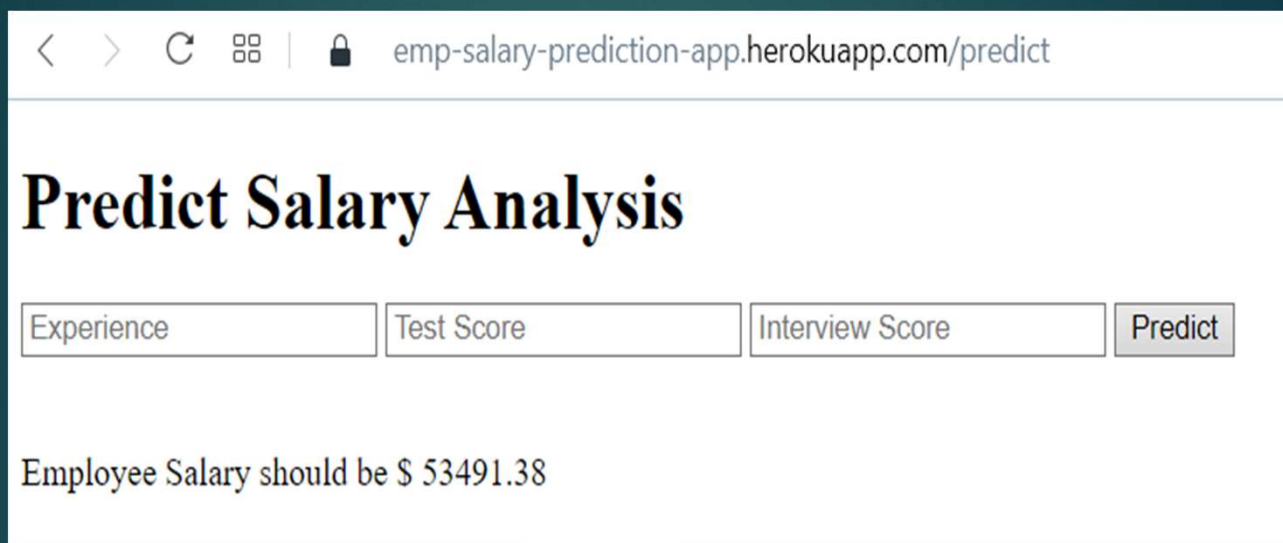
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The first screenshot shows the Heroku dashboard with the 'Deploy a GitHub branch' section. The 'main' branch is selected, and the 'Deploy Branch' button is visible. Below, the build output is shown, indicating that the Python app was detected and dependencies were installed. The 'Release phase' and 'Deploy to Heroku' steps are also visible.

The second screenshot shows the Heroku dashboard after the deployment is complete. The 'Deploy to Heroku' step is marked with a green checkmark. A red arrow points to the 'View' button, which is labeled 'Your app was successfully deployed.'

9. The web app for Predicting Salary Analysis

The screenshot shows a web browser with the URL `emp-salary-prediction-app.herokuapp.com`. The page has a title 'Predict Salary Analysis' and three input fields: 'Experience', 'Test Score', and 'Interview Score'. A 'Predict' button is located to the right of the input fields.



The screenshot shows a web browser window with the address bar displaying `emp-salary-prediction-app.herokuapp.com/predict`. The page title is "Predict Salary Analysis". Below the title, there are three input fields labeled "Experience", "Test Score", and "Interview Score", followed by a "Predict" button. The output of the prediction is displayed below the input fields: "Employee Salary should be \$ 53491.38".

III. CONCLUSION

In this document I showed simple steps to do deployment of web app on Heroku using GitHub repository.