

CELEBAL INTERNSHIP 2021 PROJECT

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ACKNOWLEDGEMENT

We wish to express our deep gratitude to our guide **Mr. PUSHPENDRA K RAJPUT**, for all advice, encouragement and constant support he has given us throughout our project work. This work would not have been possible without his support and valuable suggestions.

We sincerely thank **MR. YASH BHUTORIA**, for his great support in doing our project.

We would like to thank all our **friends** for their help and constructive criticism during our project work. Finally, we have no words to express our sincere gratitude to our **parents** who have shown us this world and for every support they have given us.

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ABSTRACT

A Simple Registration Portal for a user that allow user to register and registered user to login using python-Django, Model View template (MVT) frame work. In which POSTGRESQL is used for database connectivity where the MVT (Model View Template) is a software design pattern. It is a collection of three important components Model View and Template. The Model helps to handle database. It is a data access layer which handles the data.

The Template is a presentation layer which handles User Interface part completely. The View is used to execute the business logic and interact with a model to carry data and renders a template.

Although Django follows MVC pattern but maintains its own conventions. So, control is handled by the framework itself.

KEYWORDS: PYTHON Django, MVT, POSTGRESQL, USER INTERFACE, TEMPLATES, MODELS

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1) Introduction

This page lets user register using username, password, email address and phone number. It also lets the user sign in during sessions and at last log out. We have used python Django to build this page and used libraries like pillow. One of the nicest things we like about using Django was that while it provides lot of functionality out of the box, it's designed to be customizable, fast and reliable. A Simple Registration Portal for a user that allow user to register and registered user to login using python-Django, Model View template (MVT) frame work. In which POSTGRESQL is used for database connectivity where the MVT (Model View Template) is a software design pattern. It is a collection of three important components Models, Views and Templates. The Model helps to handle database. It is a data access layer which handles the data. The Template is a presentation layer which handles User Interface part completely (using HTML, CSS). The View is used to execute the business logic and interact with a model to carry data and renders a template. Although Django follows MVT pattern but maintains its own conventions. So, control is handled by the framework itself.

2) Literature Review

During the time period of this project we studied various books, articles and papers related to Python Django (MVT). From reading the related literature for the project we came to know that basically Django depends on the MVT framework as the name reflects it has three major components in it Models, views, template. A **Django model** is the built-in feature that Django uses to create tables, their fields, and various constraints. In short, Django Models is the SQL of Database one uses with Django. The **View** is used to execute the business logic and interact with a model to carry data and renders a template. A Django template is a text document or a Python string marked-up using the Django template language. Some constructs are recognized and interpreted by the template engine. The main ones are variables and tags.

3) Problem Statement

- To Make a registration page and register a new user using username, password and email address.
- Making a Signup page to sign in the user using sessions and then logout the user

4) Objective

The Aim of this project is to develop a reliable webpage using Python Django where user can login using their credentials in sessions.

- Implement python Django web framework to create the website.
- Store the data on database (PostgreSQL).

5) Design Methodology

The methodology we are using for our project is Agile development. Agile is a process by which a team can manage a project by breaking it up into several stages and involving continuous improvement and iteration at every stage.

The Agile model allows us to change the requirements after the development process starts, so it is suitable for our project.

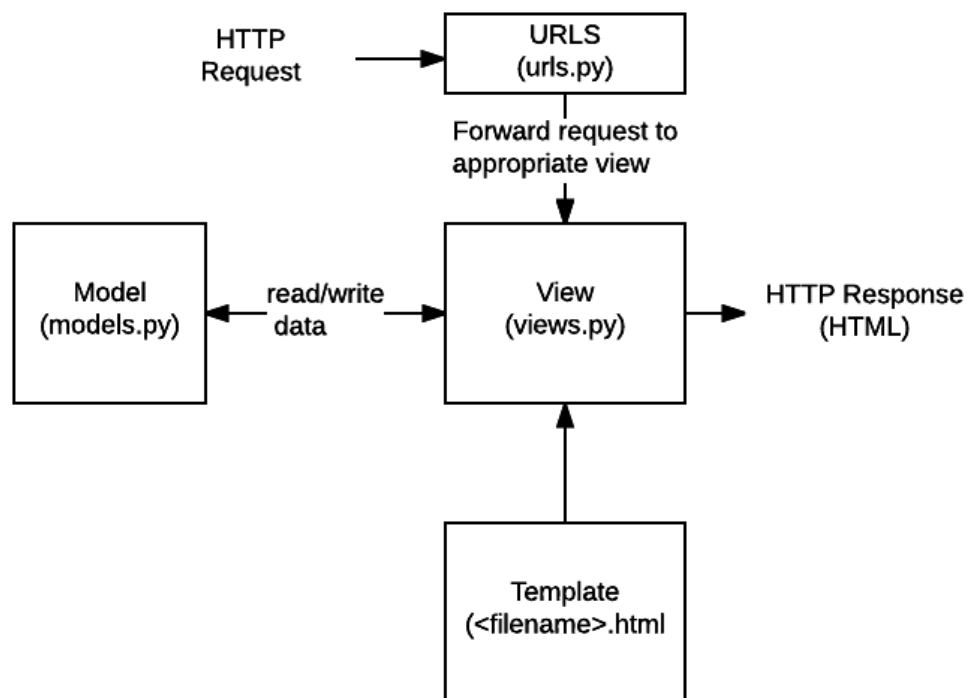
Agile SDLC model is a combination of iterative and incremental process models with focus on process adaptability and customer satisfaction by rapid delivery of working software products. Agile Methods break the product into small incremental builds. These builds are provided in iterations. Each iteration typically lasts from about one to three weeks. Every iteration involves cross functional teams working simultaneously on various areas like –

- Planning
- Requirements Analysis
- Design
- Coding
- Unit Testing and Acceptance Testing.

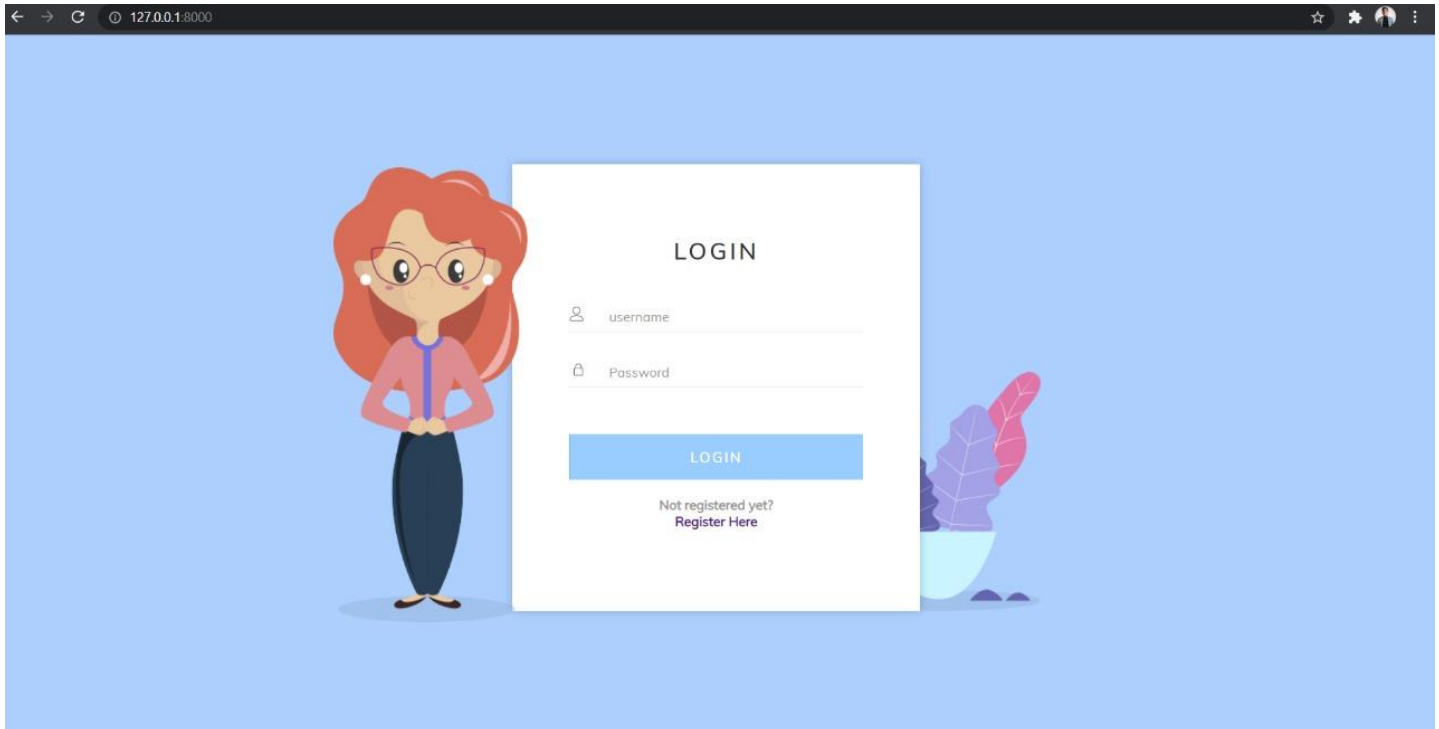
At the end of the iteration, a working product is displayed to the customer and important stakeholders.

The Agile model believes that every project needs to be handled differently and the existing methods need to be tailored to best suit the project requirements. In Agile, the tasks are divided into time boxes to deliver specific features for a release.

6) FLOW CHART:



7) Output Screen:

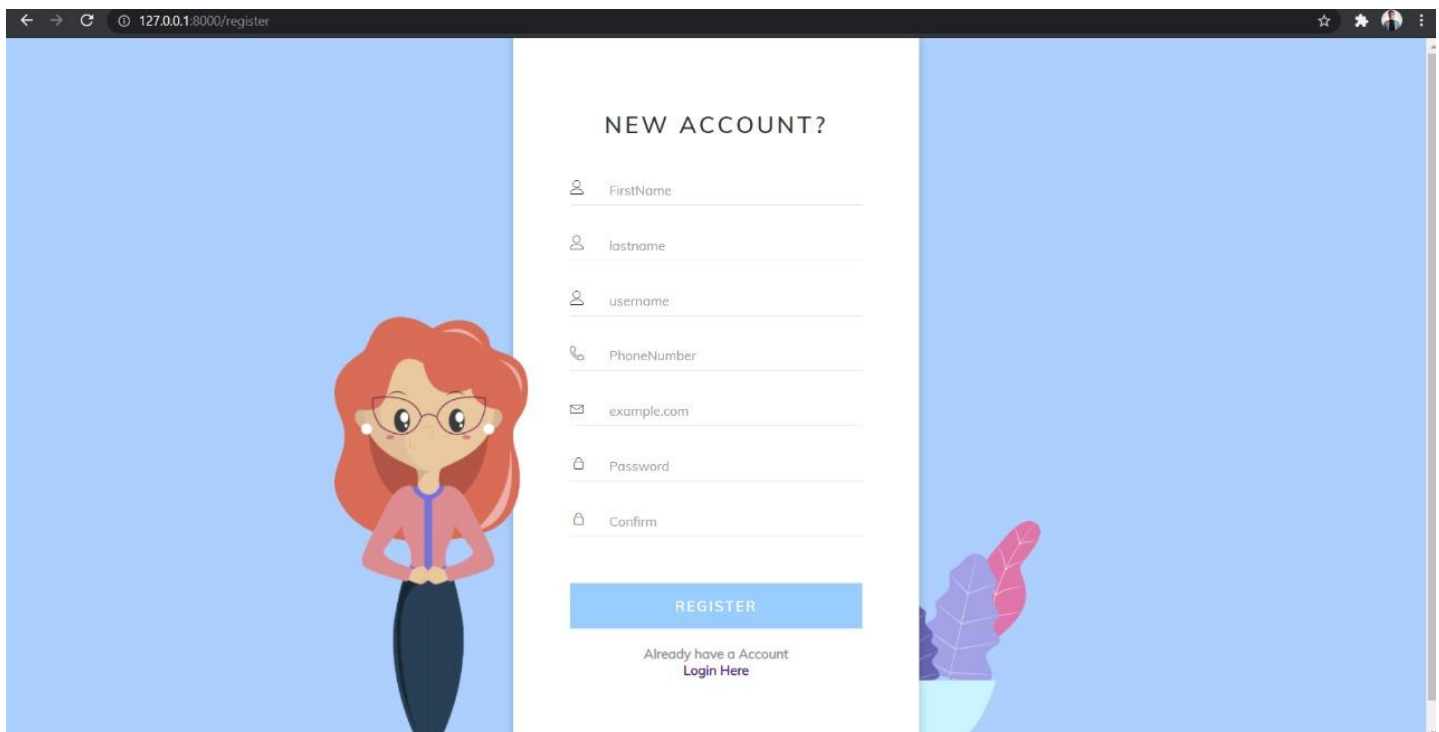


← → ↻ 127.0.0.1:8000 ☆ ⚙️ 👤 ⋮

LOGIN

LOGIN

Not registered yet?
[Register Here](#)

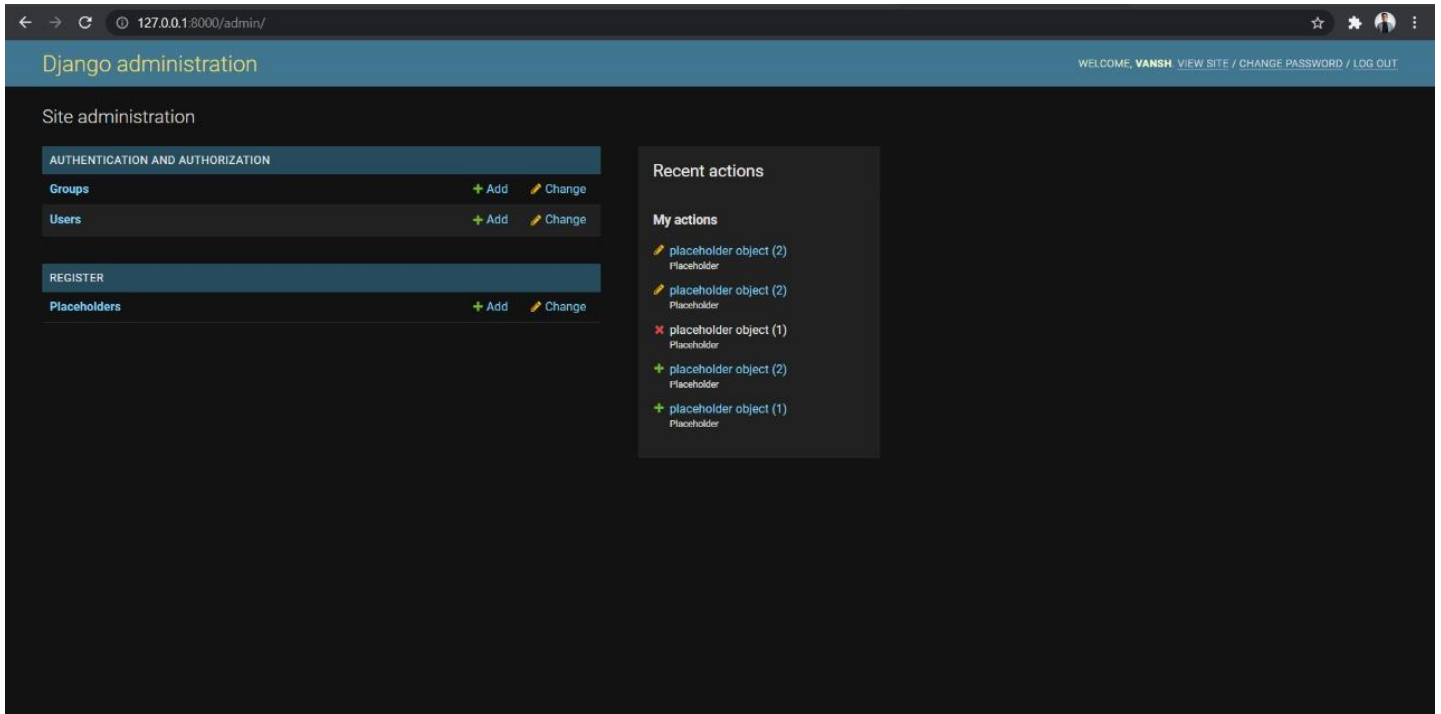
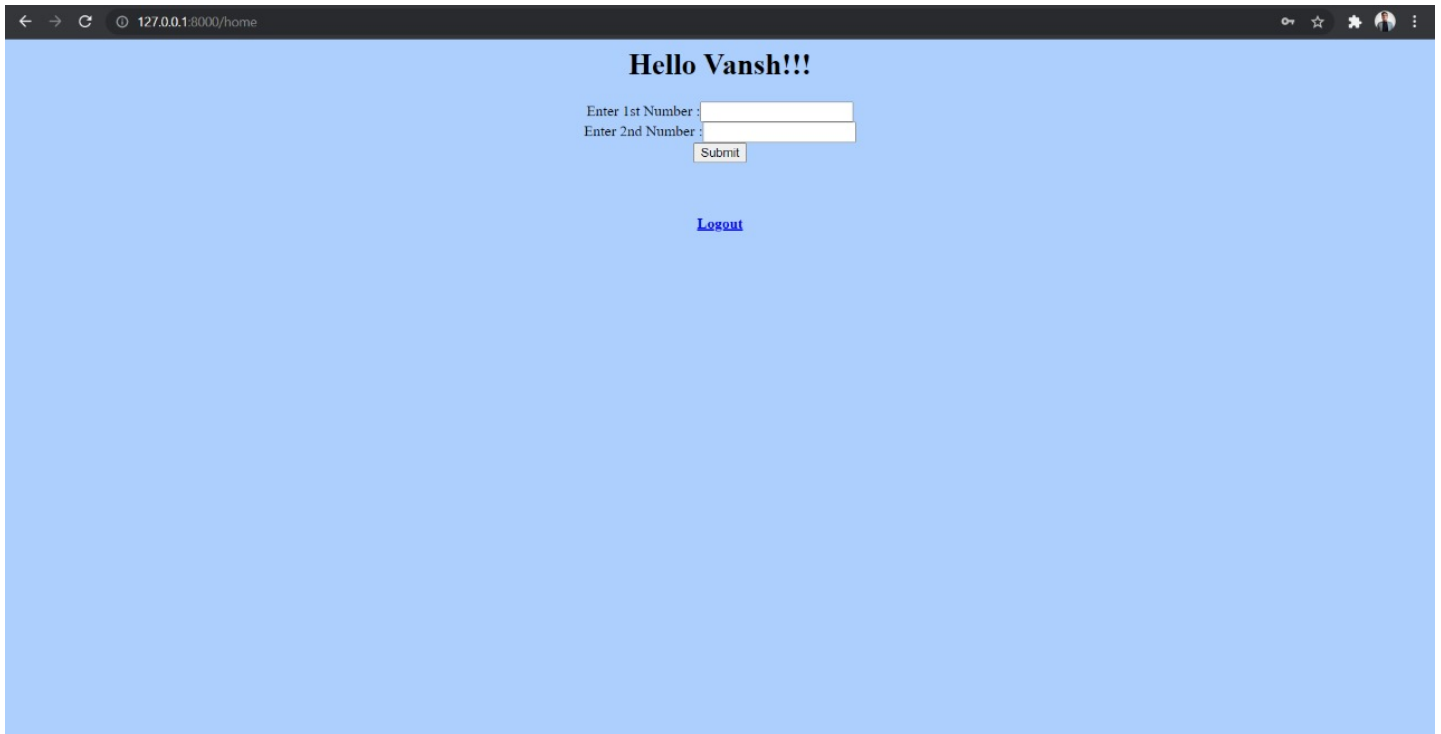


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NEW ACCOUNT?

REGISTER

Already have a Account
[Login Here](#)



8) Result Analysis

The result consists of multiple webpages which include home page, login page, register page and admin page where register page allows the user to submit the data in database to connect with the server via socket programming. We have used the RSA algorithm to encrypt and decrypt the data that is transferred between the server and the clients. The backed-up if incase the original data gets damaged. The result consists of the client connecting to the server, exchanging their keys and then the client selects the data to be encrypted which gets transferred to the server

9) Conclusion and Future Scope

- Our project allows the user to register itself and login using those credentials in sessions. Verify if a user will be able to login with a valid username and valid password. Verify if a user cannot login with a valid username and an invalid password.
- We will integrate this page with AWS so that every time user gets a mail on register email id when someone login to the account.
- It will tell the basic information of the login user example: IP address, Location

10) References

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