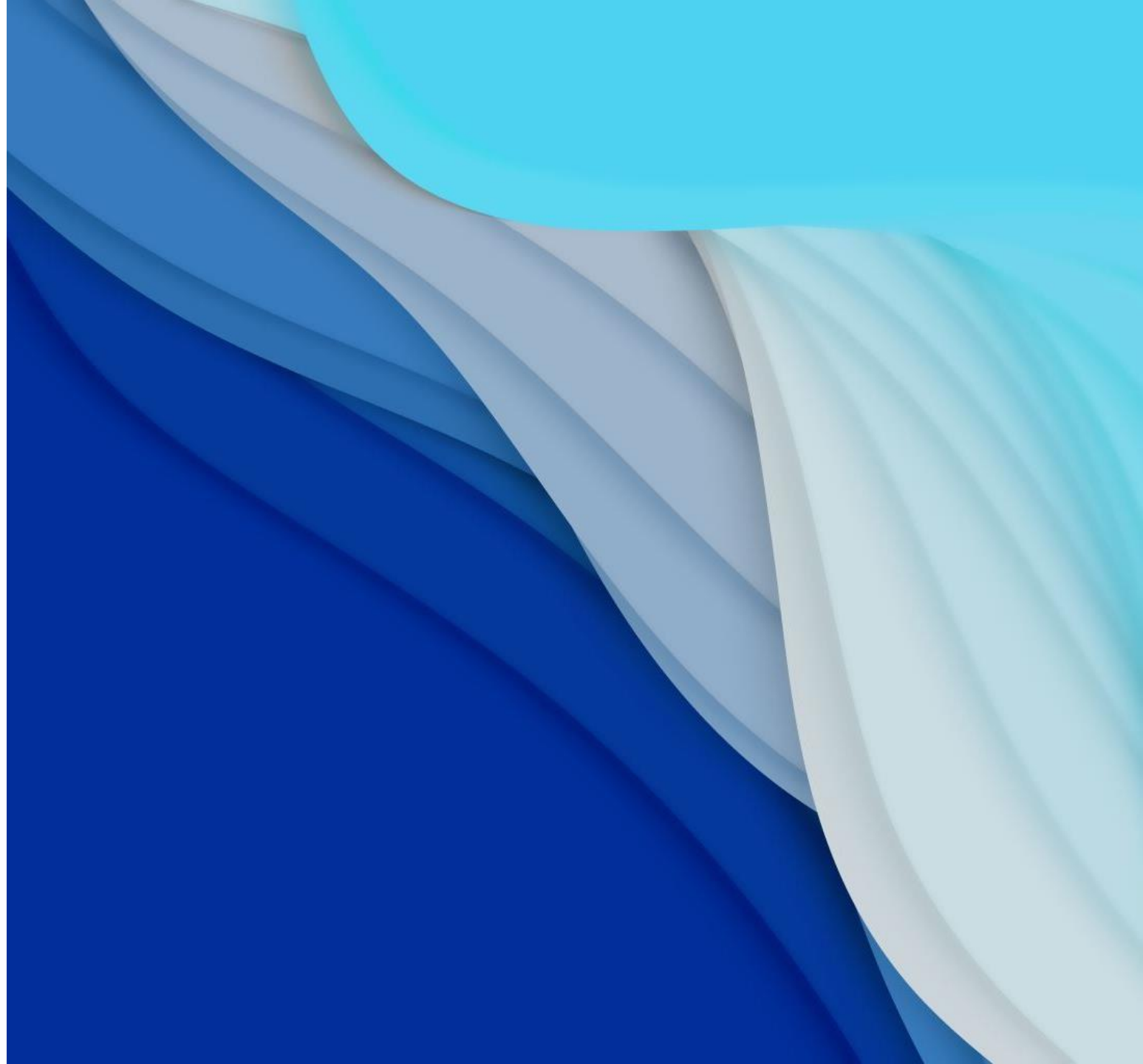
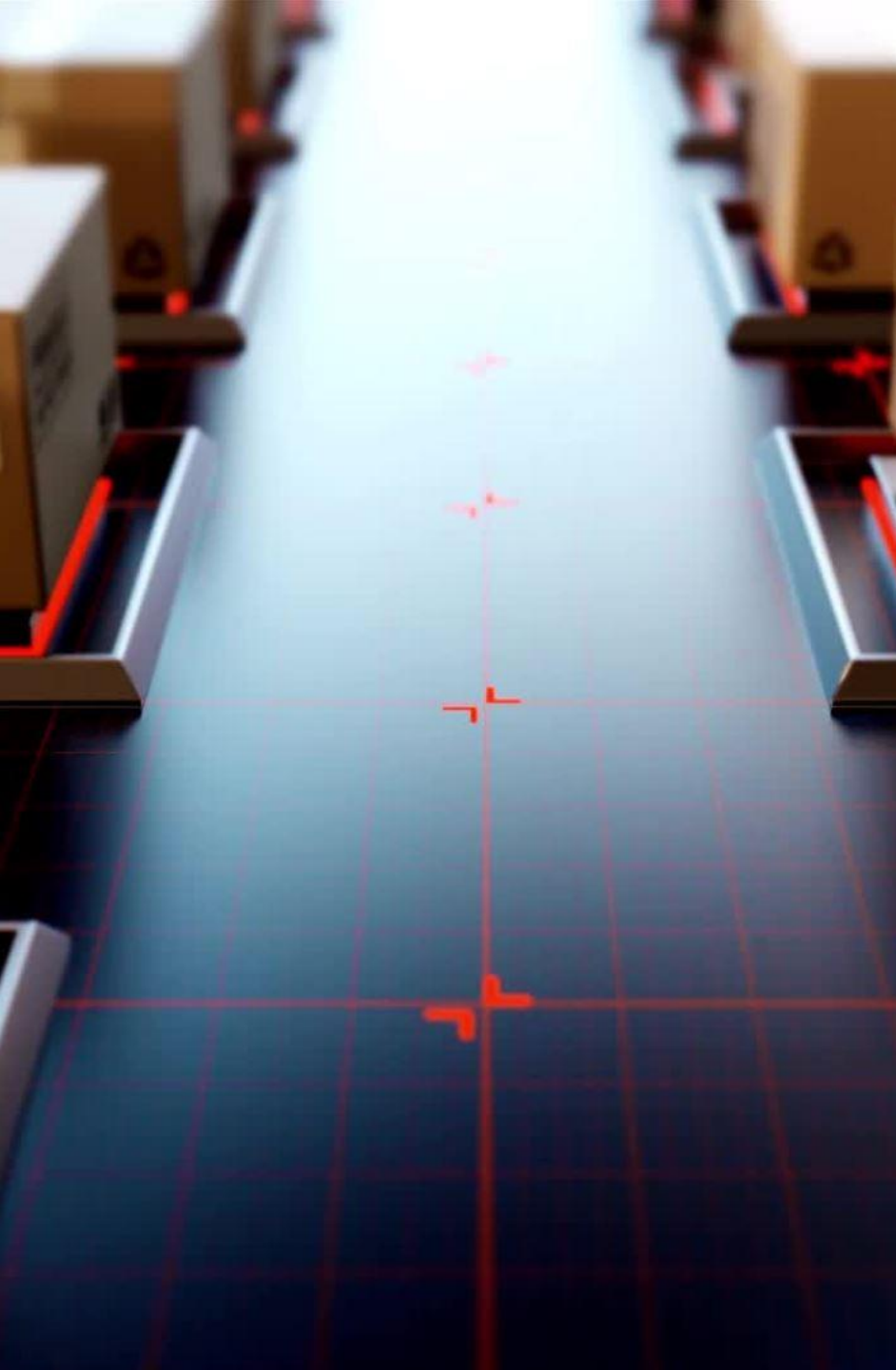




Inventory Management and Verification System





Project Description

- View the Dashboard
- Add new Item
- Search for existing Item
- Add, edit, or delete room, floor, category in the settings
- Download CSV on the basis of category

A close-up photograph of a film reel and a film strip. The reel is on the left, showing its white plastic frame and the film strip wound around it. The film strip is on the right, showing its perforated edge and the sprocket holes. The background is dark and out of focus.

Project Setup

- To run the project on your local machine, follow the instructions

Install Required Packages


- Open the terminal and change the directory to the <project base directory>
- Enter command "python -m venv env" followed by `"/env/scripts/activate"` to create a virtual environment and activate the virtual env
- Enter Command "pip install -r requirements.txt" to install all the dependencies
 - Django==2.2.7
 - django-crispy-forms==1.8.0
 - psycpg2
 - pytz==2019.3
 - sqlparse==0.3.0





Creating Database using PgAdmin

- Install PgAdmin
- Create a new PostgreSQL database under Servers and define its properties



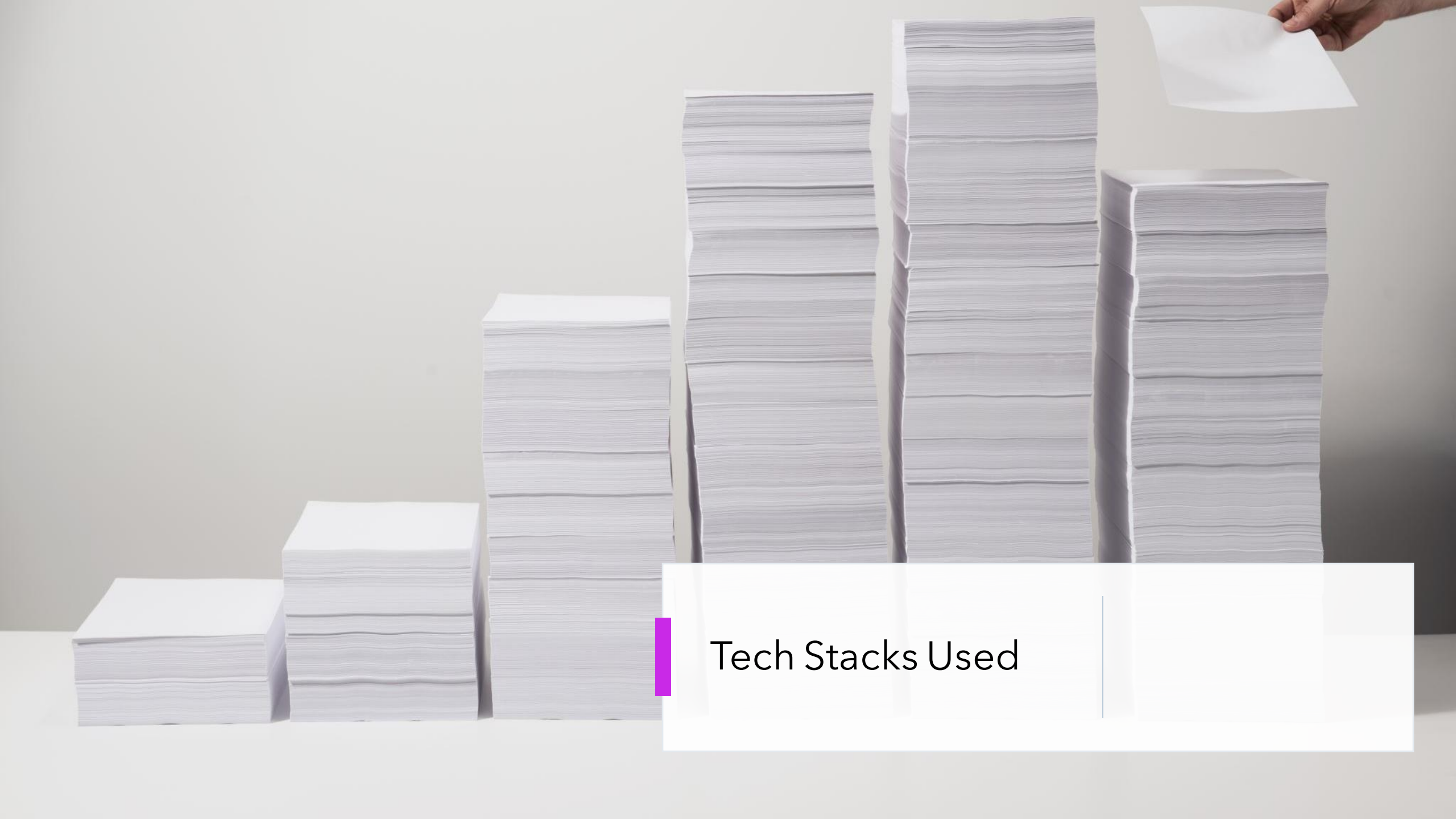
Initial Backend Setup

- Go to the directory containing bin of PostgreSQL
- Open the terminal and enter "psql -U"
- Enter \i "path of dumpfile"



Running the project

- Go to the project directory and activate the virtual env
- Enter following commands
 - `python manage.py makemigrations`
 - `python manage.py migrate`
 - `python manage.py createsuperuser` and add an admin user
 - `python manage.py runserver`
 - Open 127.0.0.1:8000 on your browser and login with admin credentials



Tech Stacks Used



Django

- The project is made using Django
- Django is a high-level Python web framework that encourages rapid development and clean, pragmatic design
- Built by experienced developers, it takes care of much of the hassle of web development, so you can focus on writing your app without needing to waste a lot of time for no reason

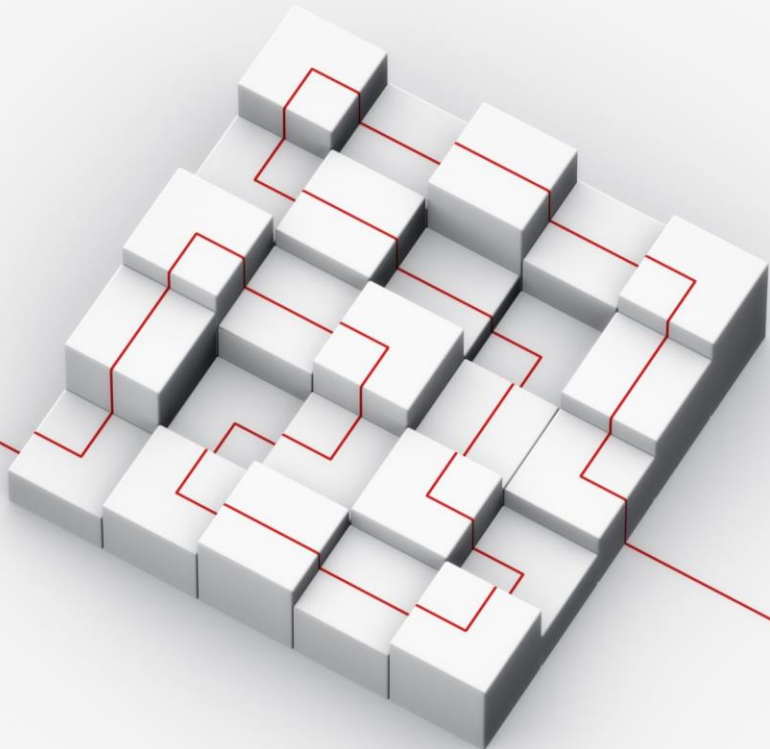


Database

- This application uses PostgreSQL database infrastructure
- PostgreSQL is a powerful, open source object-relational database system that uses and extends the SQL language combined with many features that safely store and scale the most complicated data workloads
- The origins of PostgreSQL date back to 1986 as part of the POSTGRES project at the University of California at Berkeley and has more than 30 years of active development on the core platform

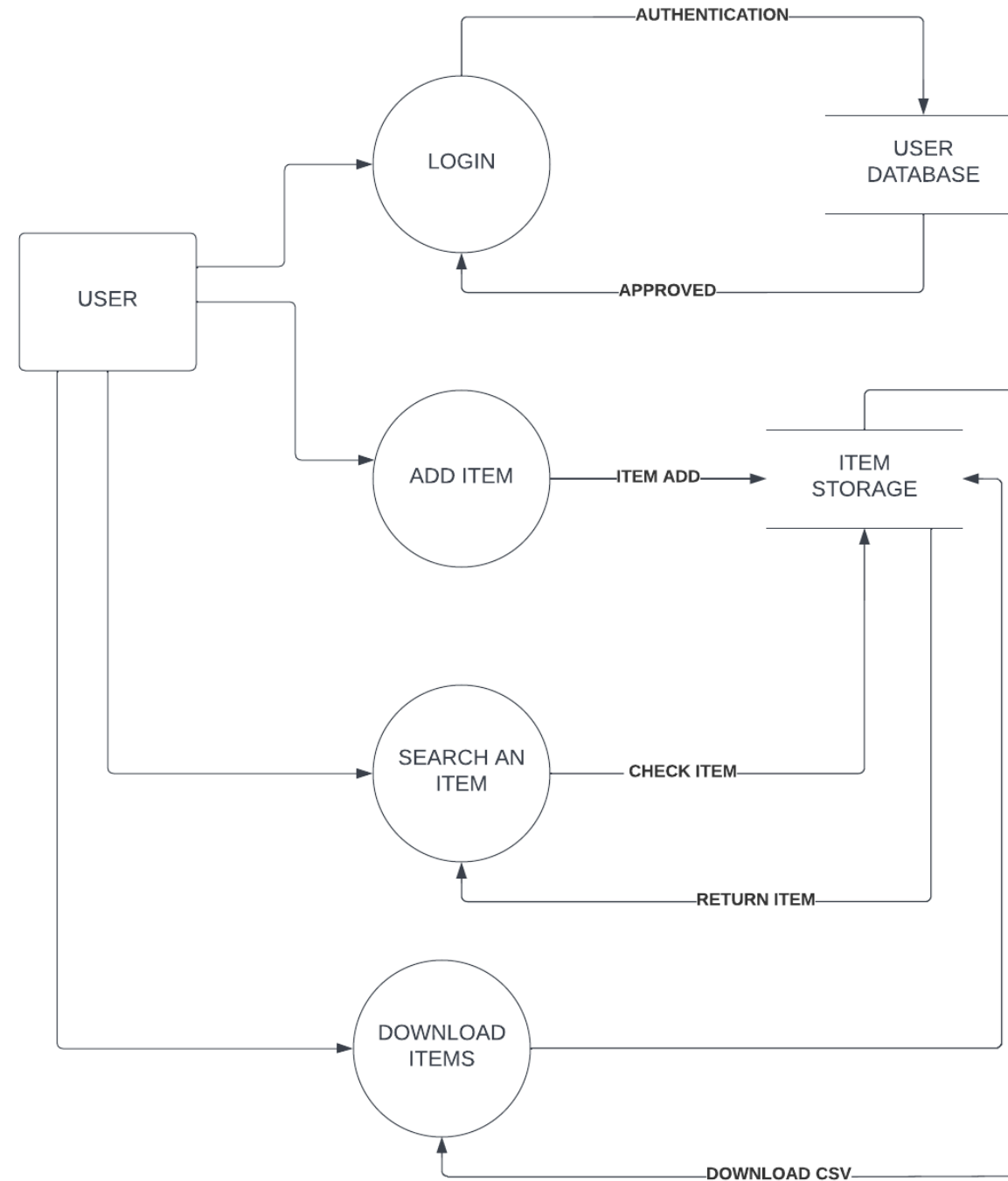
Use Case Diagram

- A use case diagram is a way to summarize details of a system and the users within that system
- It is generally shown as a graphic depiction of interactions among different elements in a system
- Use case diagrams will specify the events in a system and how those events flow, however, use case diagrams do not describe how those events are implemented



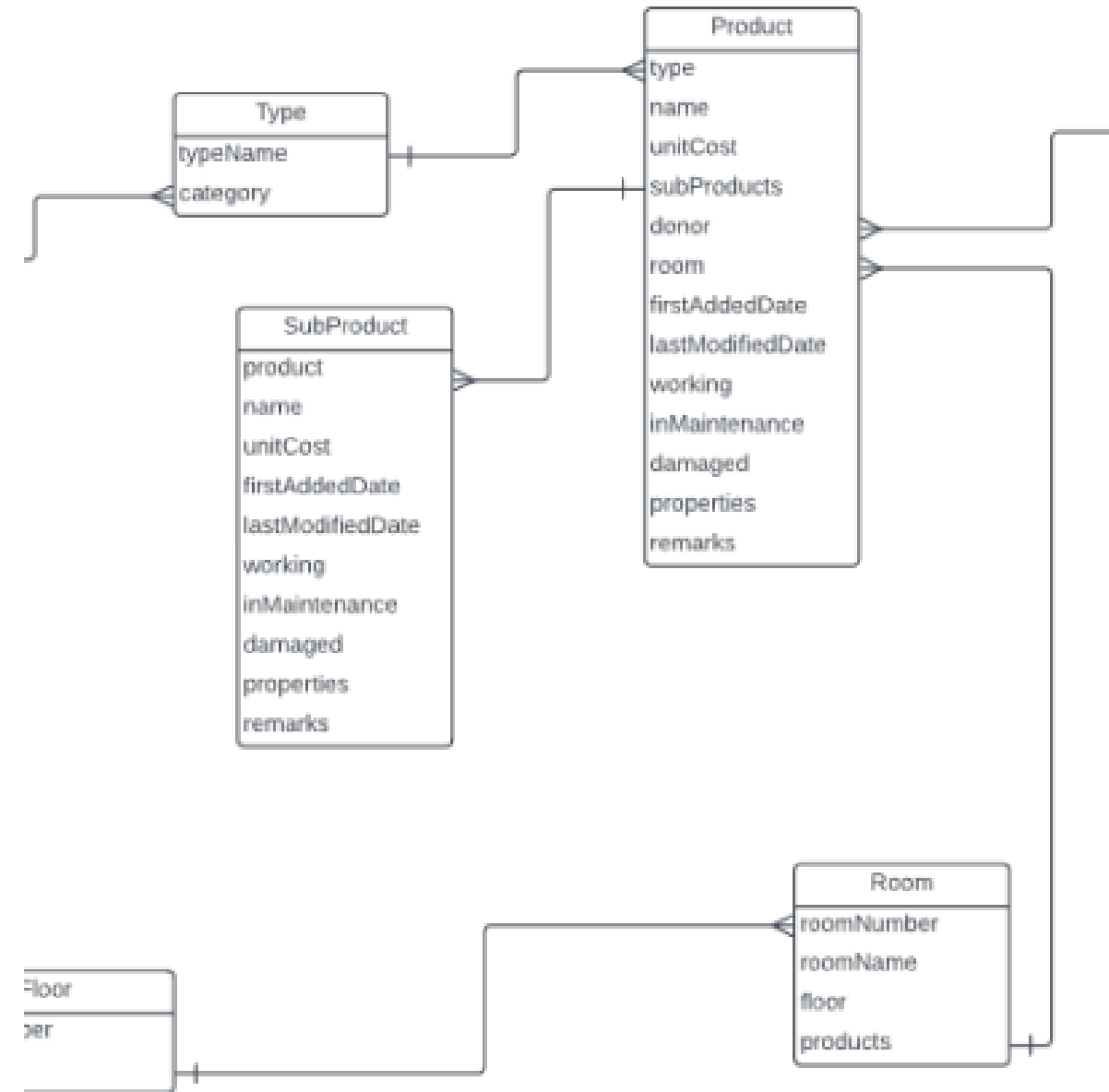
Data Flow Diagram

- A data flow diagram maps out the flow of information for any process or system
- It uses defined symbols like rectangles, circles and arrows, plus short text labels, to show data inputs, outputs, storage points and the routes between each destination



Entity Relationship Diagram

- A data flow diagram maps out the flow of information for any process or system
- It uses defined symbols like rectangles, circles and arrows, plus short text labels, to show data inputs, outputs, storage points and the routes between each destination
- Also known as ERDs or ER Models, they use a defined set of symbols such as rectangles, diamonds, ovals and connecting lines to depict the interconnectedness of entities, relationships, and their attributes



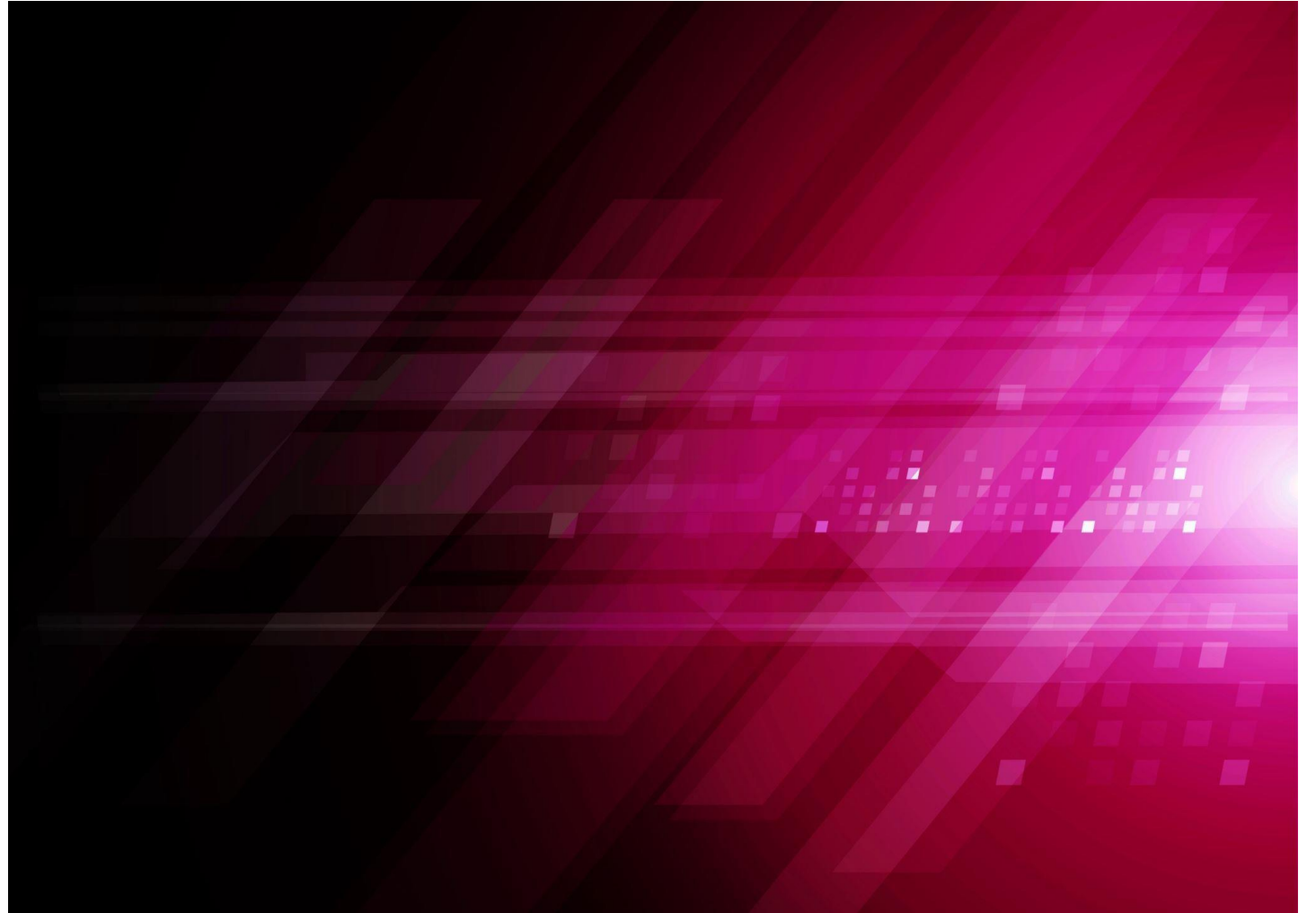


User Manual



LOGIN

Enter the Username and
Password to login





DASHBOARD



Working



Out of Order



Repairable



ADD ITEM

- An item is the actual product in the inventory that we are keeping track of
- From the 'Add Item' page we can add a new item in the inventory
- If the item is added in a preexisting room and floor, just a category name field is sufficient, while, if the item is to be added on a new floor or a new room then we need to create such a floor or a room or both before actually adding the item in the inventory



SEARCH

- All the existing products in the inventory can be searched from this page
- In order to navigate through search, if a particular item is to be searched then we can simply type the name in the search box
- We can also add to the floor and room from the particular searched item along with delete the item, reallocate, and go to the verification log all from the options menu in the actions tab



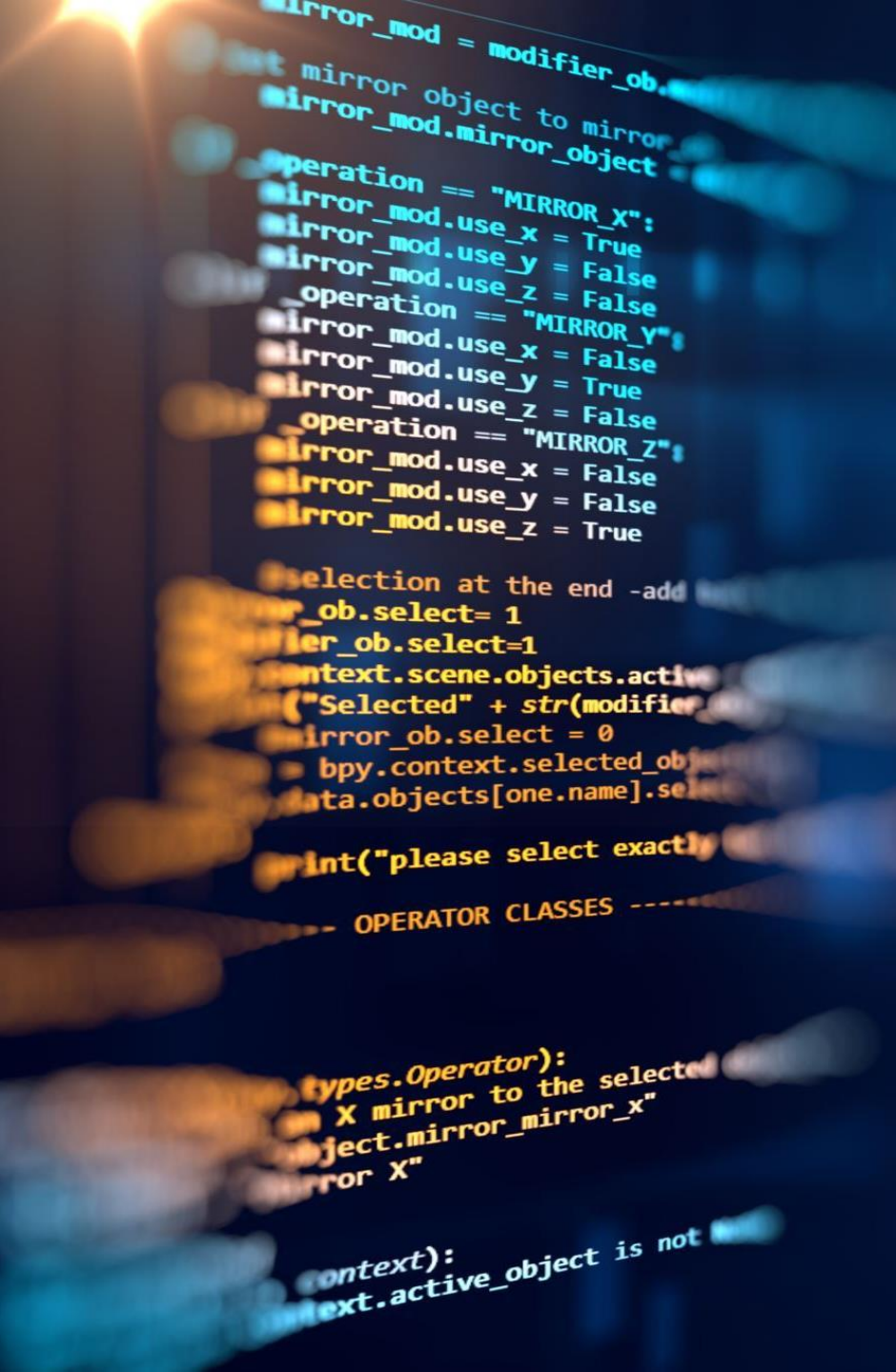
VERIFY ITEMS

- The actual presence of an item in the inventory needs to be verified by someone in the inventory
- Thus, in verify page we submit a request for the verification about a particular item in the inventory, which is checked and verified by someone and returns the information about the presence or absence of that item in the inventory



SETTINGS

- Add
- Edit
- Delete



DOWNLOAD

- CSV files can be downloaded from the download section
- Users can download csv directly from the website which is based on the category of items
- CSV files can be further used in other applications to work with the data



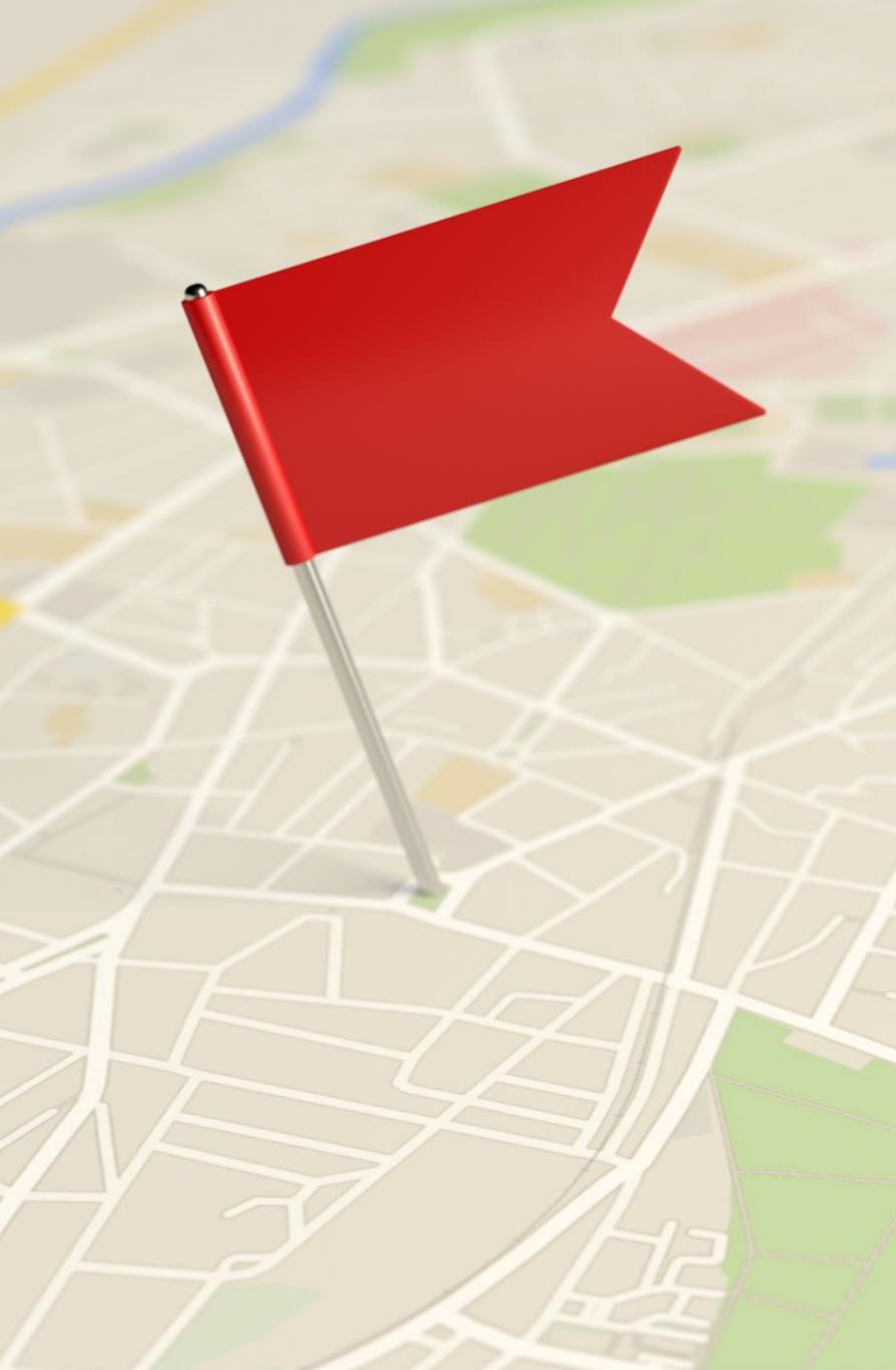
LOGOUT

- Users can log out by clicking log out



NEW USER

- A super user is created during the initial setup of the website
- New Users can be added to the website
- New users have all the privileges of an admin hence they are also admin



Links

- <https://github.com/s1sayoush/ICTC>
<https://www.djangoproject.com/>
<https://lucid.app/documents#/dashboard>
<https://www.postgresql.org/> <https://ictc.ioe.edu.np/>