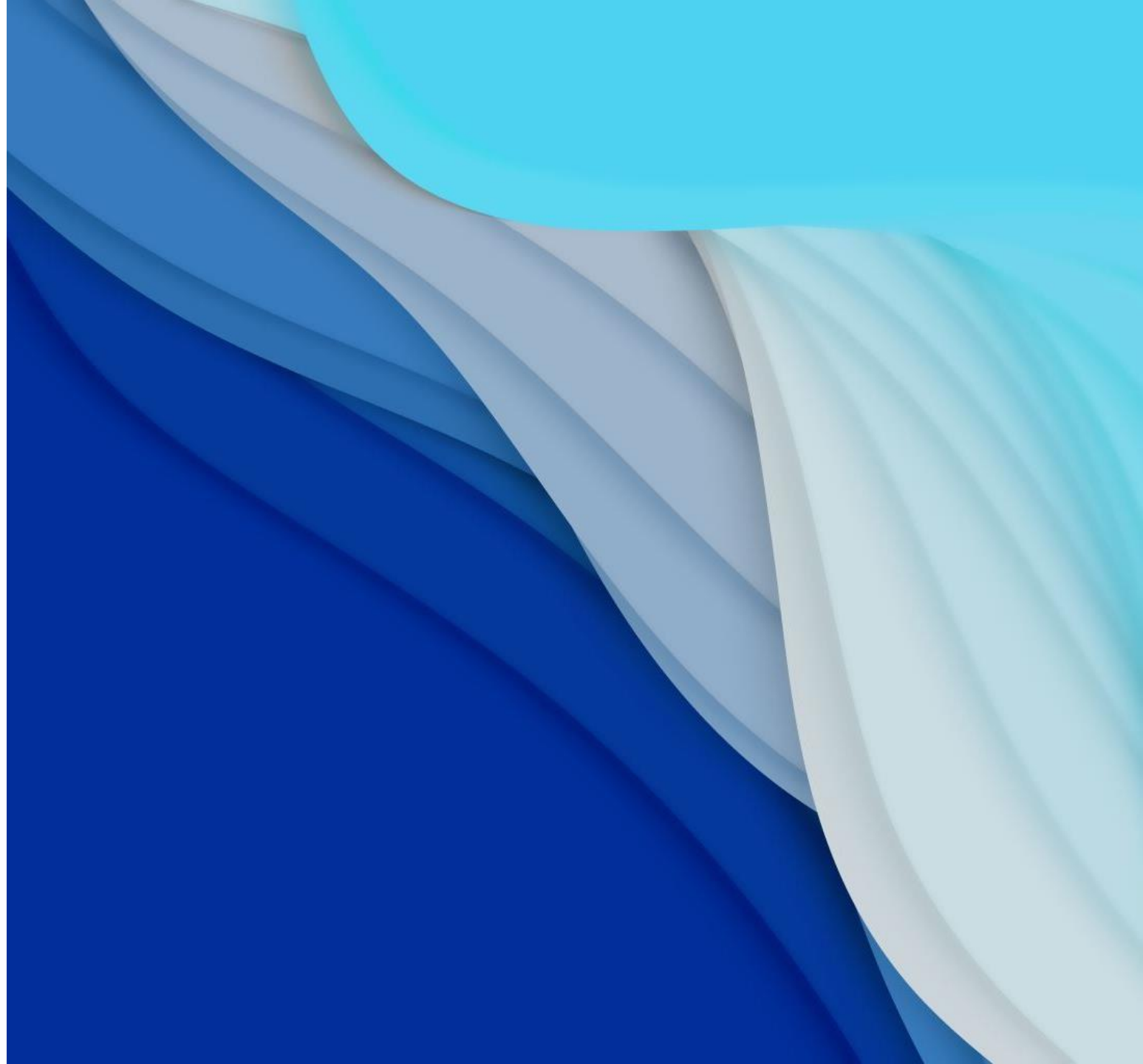
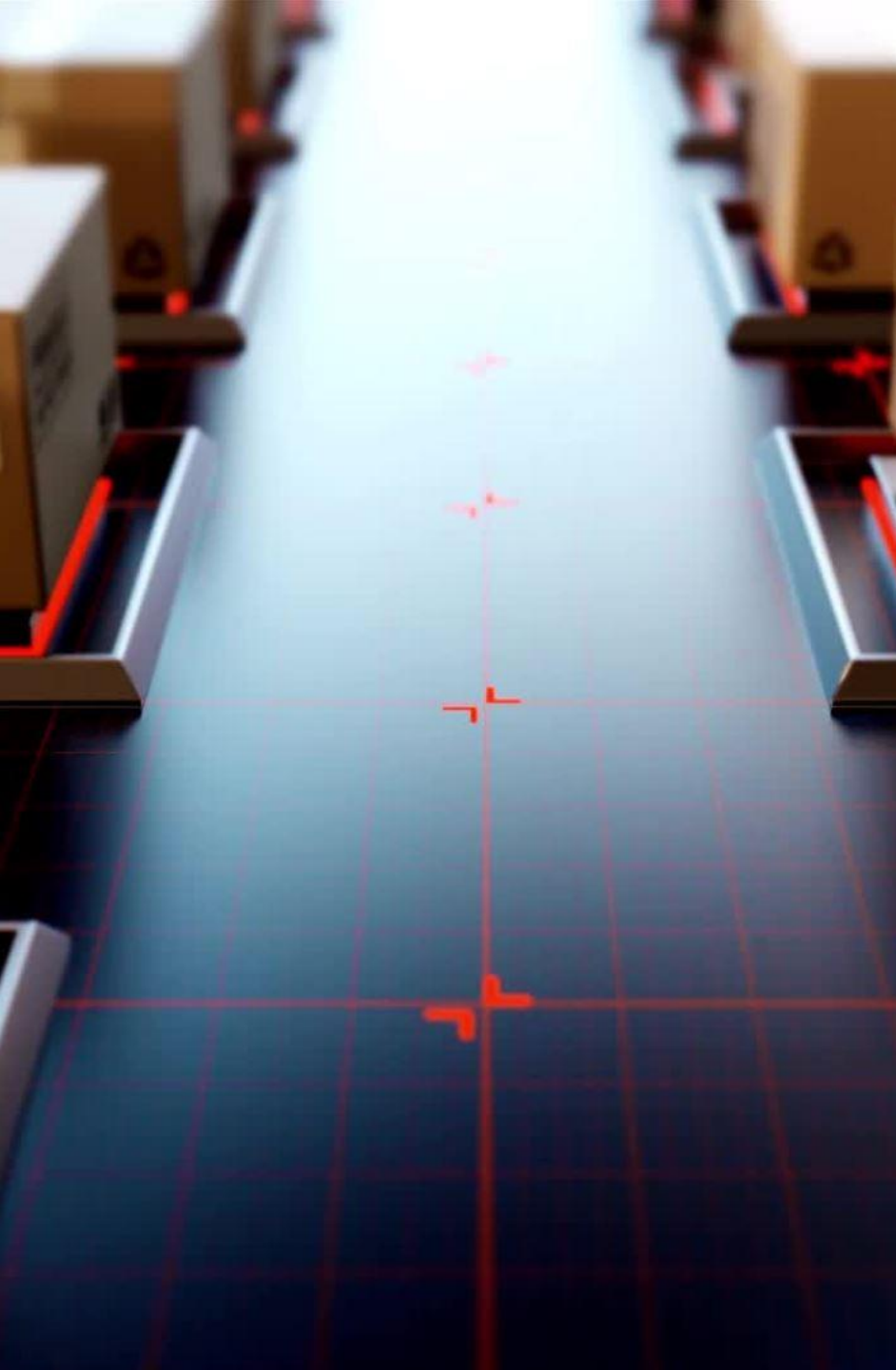




Inventory Management and Verification System





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

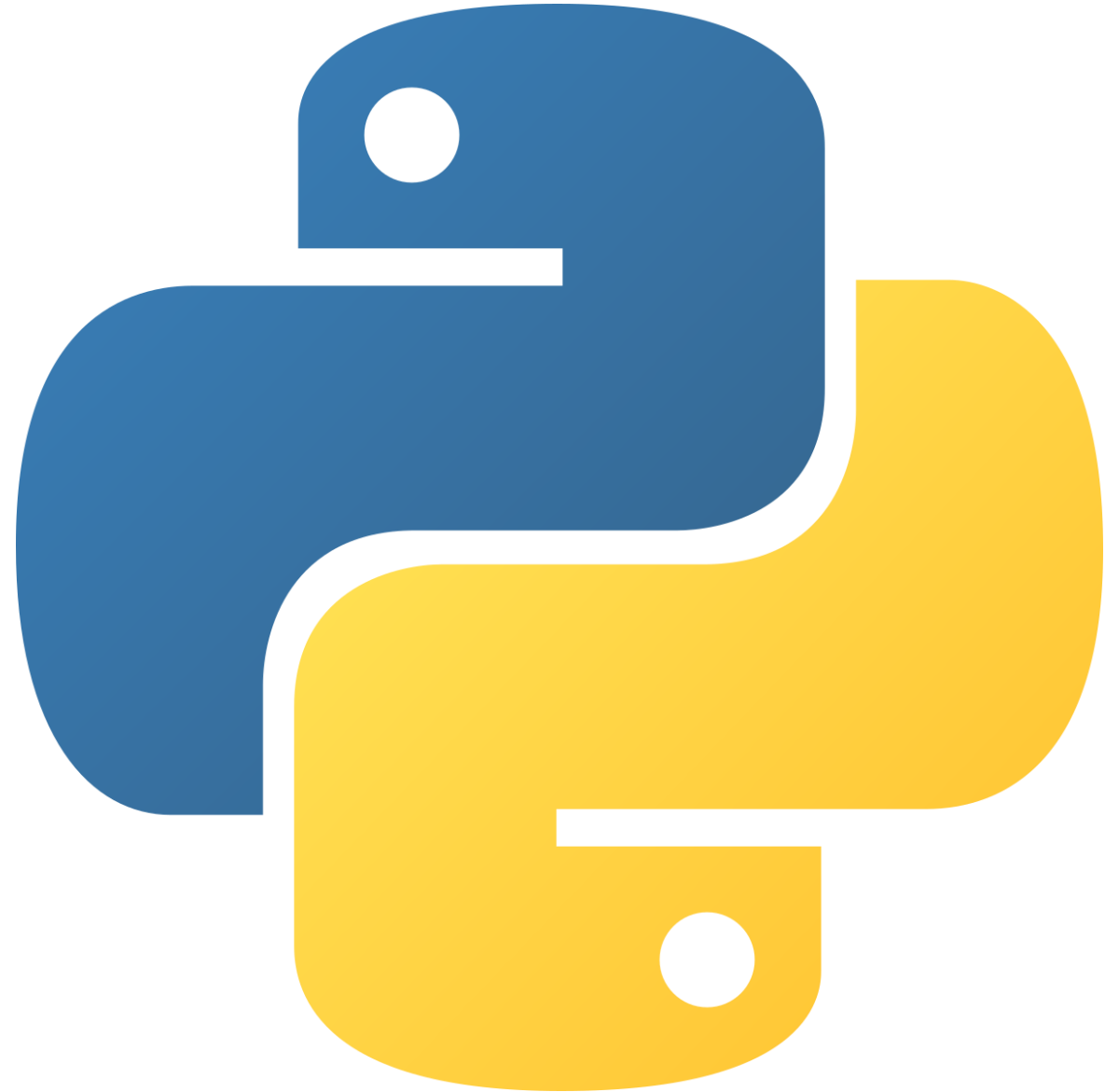


Project Setup

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

Install Required Packages


- Open the terminal and change the directory to the <projectbase 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
 - psycopg2
 - pytz==2019.3
 - sqlparse==0.3.0





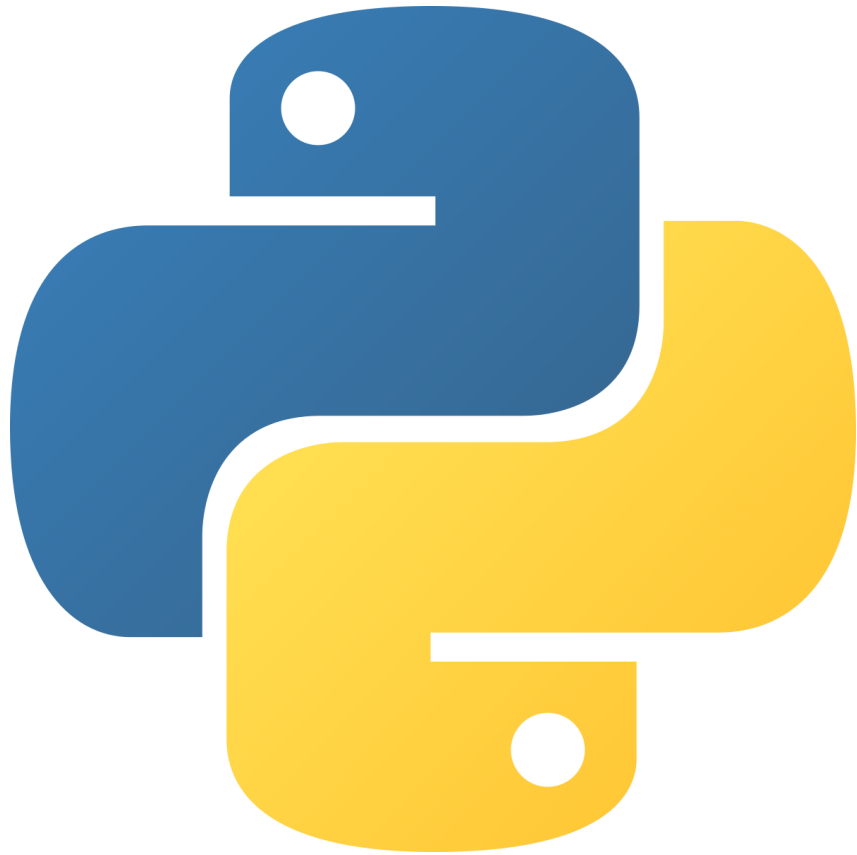
Creating Database using PgAdmin

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



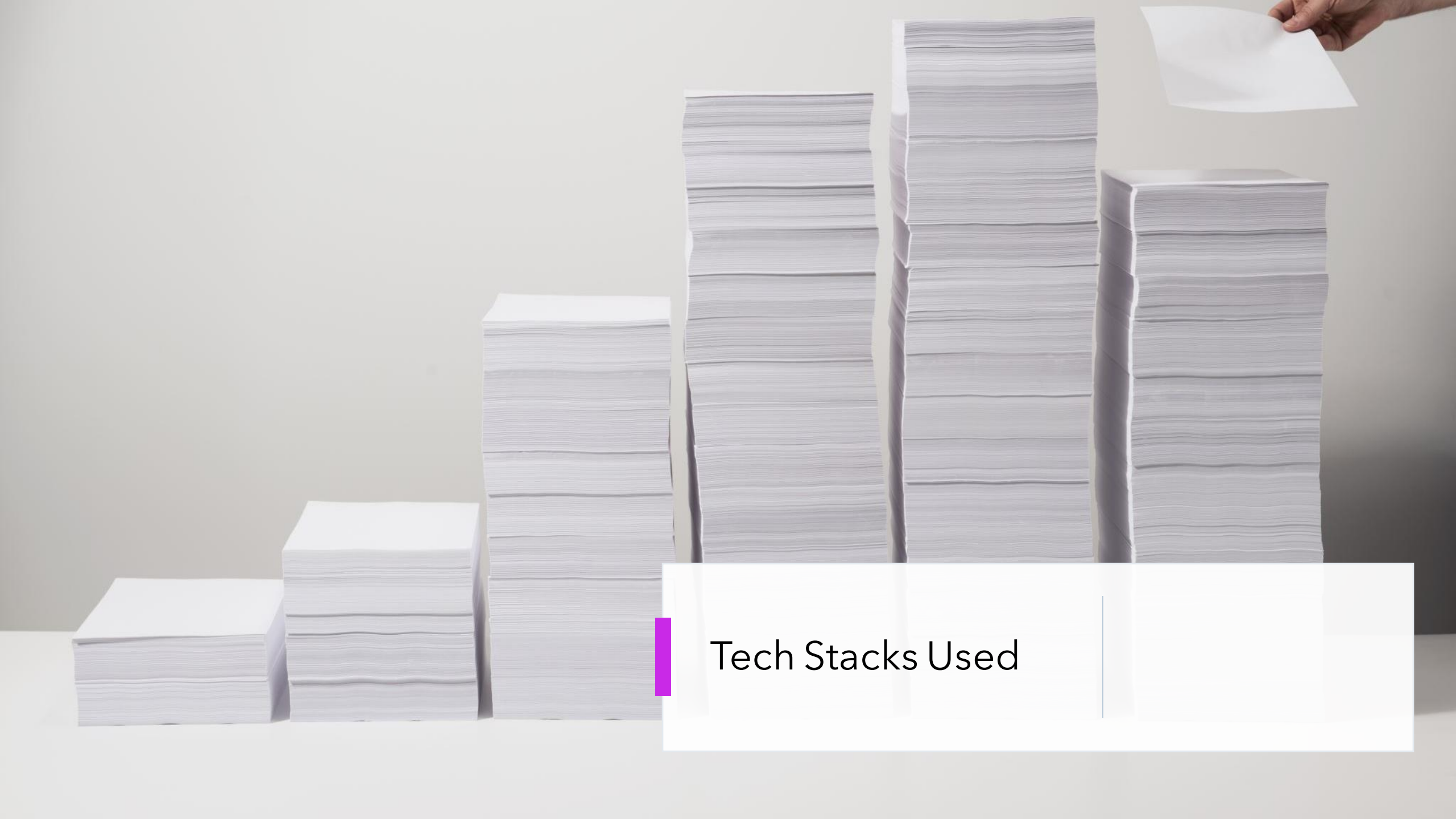
Initial Backend Setup

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



Running the project

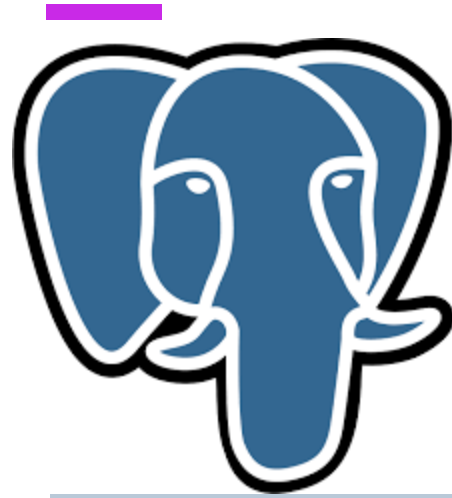
- Go to the project directory and activate the virtual env
- Enter following commands
 - `python manage.py makemigrations`
 - `python manage.py migrate`
 - `python manage.py createsuperuser` and add an admin user
 - `python manage.py runserver`
 - Open 127.0.0.1:8000 on your browser and login with admin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



Tech Stacks Used



-
- 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

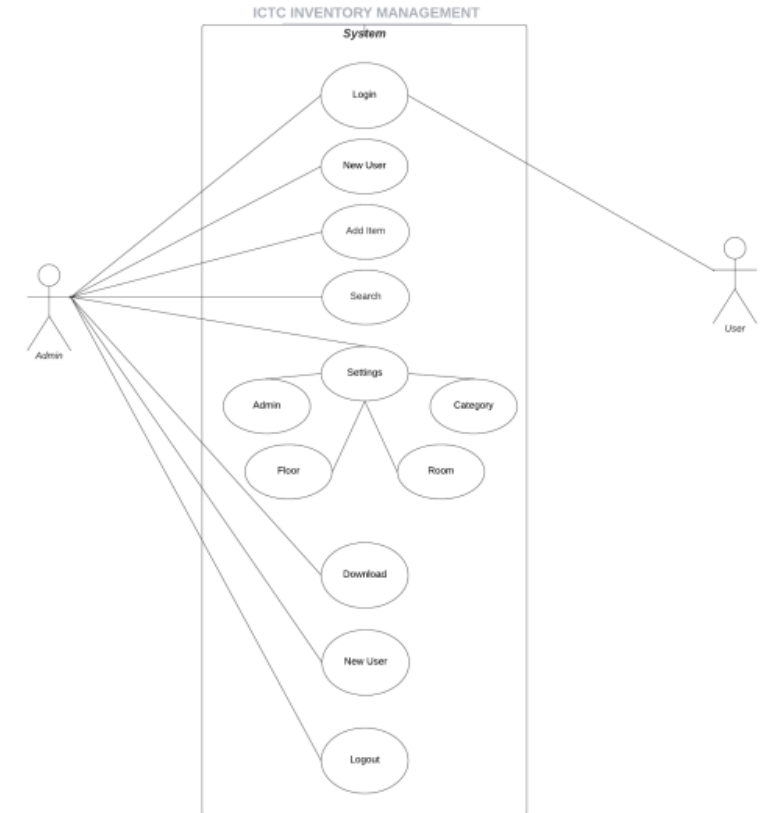


Database

- 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

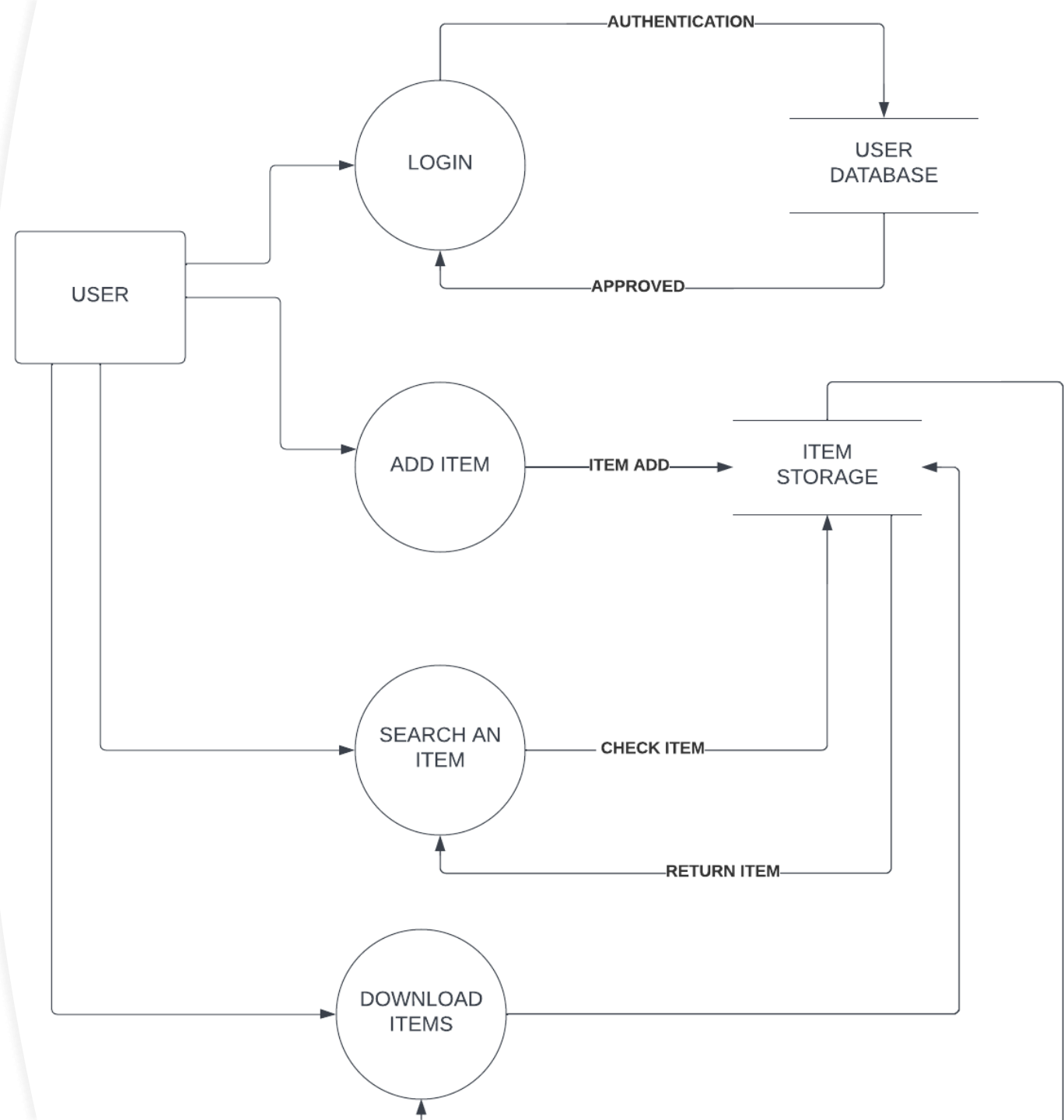
Use Case Diagram

- 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



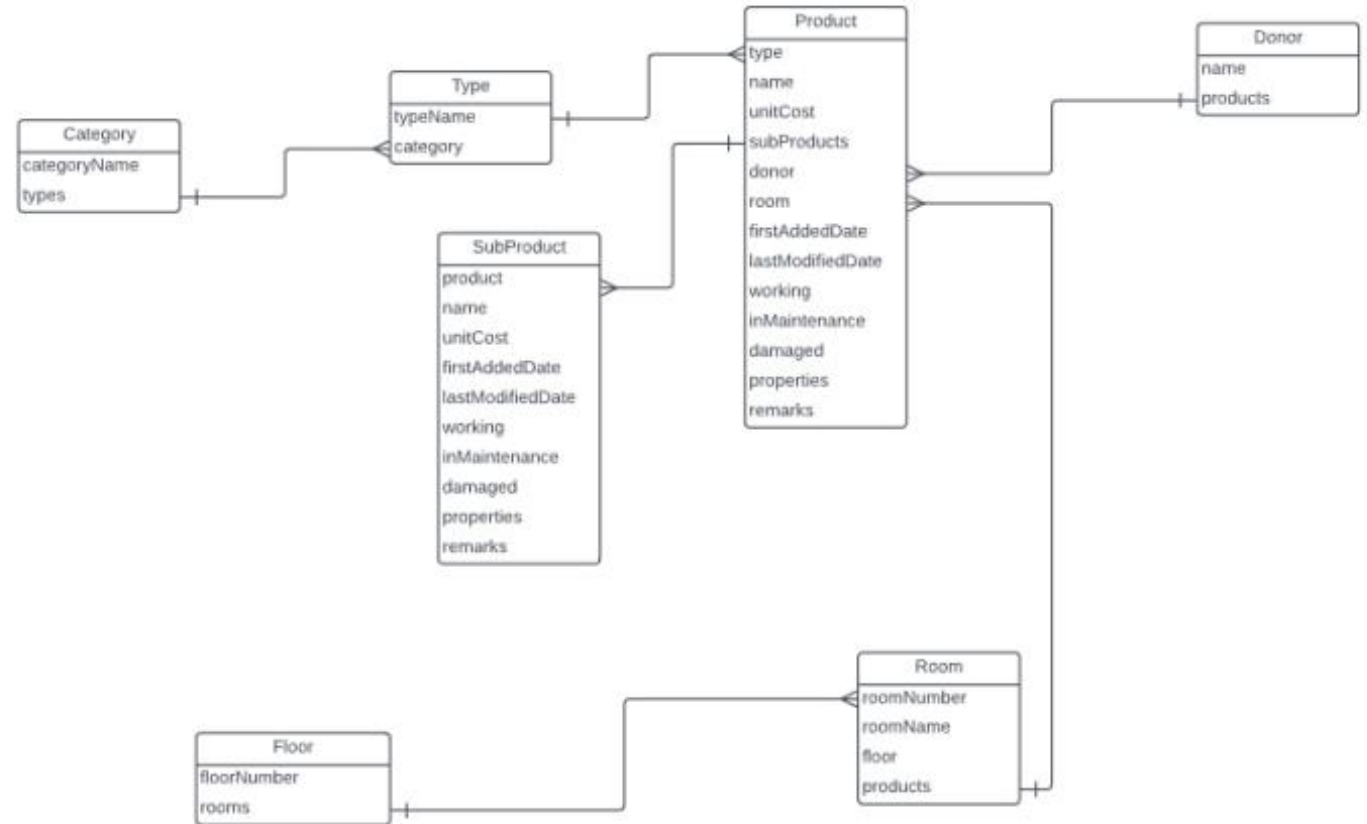
Data Flow Diagram

- 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

Log In

Username*

studds

Password*

....

login

DASHBOARD



Working



Out of Order



Repairable

Dashboard

WORKING



284

OUT OF ORDER



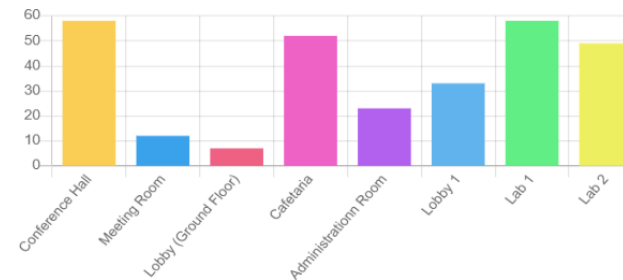
3

REPAIRABLE



5

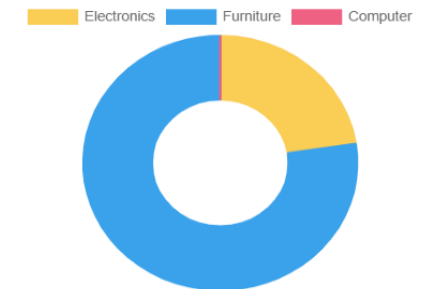
Items based on Room



Number of items

292

Items based on Category



Number of categories

3

Number of item types

38

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

Add Item

If you want to add an existing item, add from Search

Select a category for the item

Electronics

Select

Create new category

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

+ Room <input type="text" value="All"/> + Cat						
<input type="text"/>						
Model	Working	Out Of Order	Repairable	Room	Cost per item	Remarks
None	3	1	0	2:Conference Hall	None	Not working
None	4	0	0	6:Administrationn Room	None	-
None	1	0	0	6:Administrationn Room	None	M5035-HP
None	30	0	0	8:Lab 1	None	-
None	0	0	2	8:Lab 1	None	-
lone	1	0	0	8:Lab 1	None	-

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

Verify item "Samsung Smart TV"

Name*

Samsung Smart TV

Enter the brand name of the item

Model

Smart

Enter the model of the item

Cost per item

Enter the cost per item

Room

2.Conference Hall

Select room where it is kept

Date of acquire*

2022-03-17

Enter the date of acquire

Number of working items*

1

Date of acquire*

2022-03-17

Enter the date of acquire

Number of working items*

1

Number of Repairable items*

0

Number of Out-of-order items*

0

Remarks*

Enter remarks

Source of item*

Amazon

Verify

SETTINGS

- Add
- Edit
- Delete

Settings


Floor

 [Add](#)

 [Edit](#)

 [Delete](#)

Category

 [Add](#)

 [Edit](#)

 [Delete](#)


Room

 [Add](#)

 [Edit](#)

 [Delete](#)

Admin

 [Update Info](#)

DOWNLOAD

Download

Category



Electronics



Furniture



Computer



1 (1).csv



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

Log Out

Are you sure you want to log out?

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

New User

Create new admin

Username*

Required. 150 characters or fewer. Letters, digits and @/./+/-/_ only.

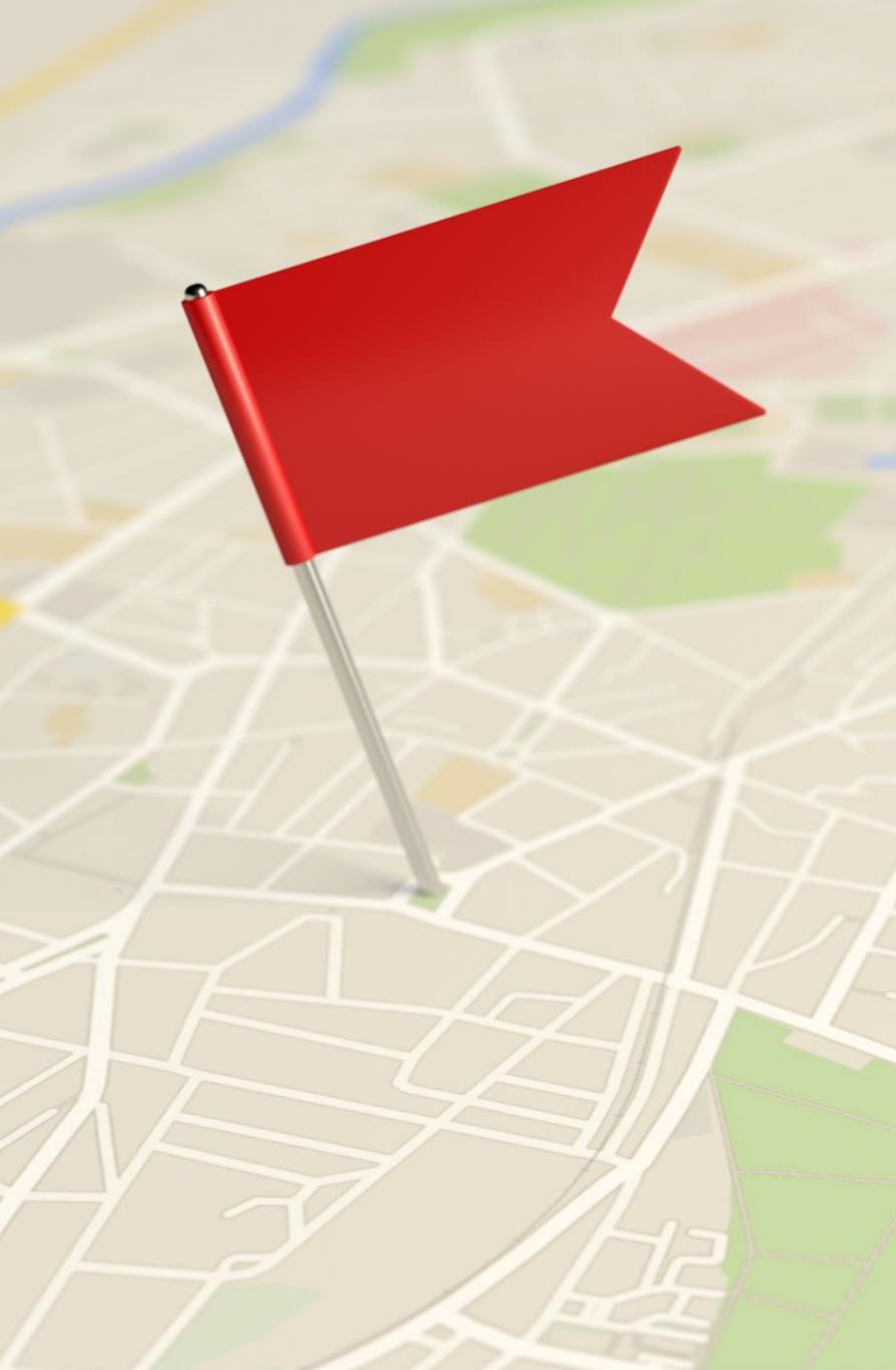
Password*

- Your password can't be too similar to your other personal information.
- Your password must contain at least 8 characters.
- Your password can't be a commonly used password.
- Your password can't be entirely numeric.

Password confirmation*

Enter the same password as before, for verification.

Sign Up



Links

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