**Database Design:**

**Table**: User

**Description**: Extends the default [User](https://docs.djangoproject.com/en/3.1/ref/contrib/auth/) class in Django.

**Fields**:

* Id: *int* - unique ID of every user.

**Table**: Heatmap

**Description**: Can be used to store saved heatmap configurations for each user.

**Fields**:

* Id: *int* – unique ID for every saved heatmap.
* User\_id: *int* – foreign key referencing Id from table User.
* Agent\_location: *2D array* – store the x and y coordinate of all agents (infected/normal).
* Probabilities: *2D array* – store the probability of getting infected of all agents.

**Table**: Building

**Description**: Keep track of all buildings on campus.

**Fields**:

* Id: *int* – unique ID for every building.
* Name: *char(200)* – name of each building.

**Table**: Floor

**Description**: Keep track of all floors within a particular building on campus.

**Fields**:

* Id: *int* – unique ID for every floor.
* Building\_id: *int* – foreign key referencing Id from table Building.
* Number: *char(200)* – floor name (B1, 1, 2 etc.).

**Table**: Room

**Description**: Keep track of all rooms on a floor within a building on campus.

**Fields**:

* Id: *int* – unique ID for every room.
* Floor\_id: *int* – foreign key referencing id from table Floor.
* Room\_number: *char(4)* – room number (160, 260A etc.).
* Max\_occupancy: *int* – maximum occupancy under “normal” conditions.
* Max\_pandemic occupancy: *int* – maximum allowed occupancy under pandemic conditions.
* Blueprint: *URL* – could be used to store the URL of floor plans on the cloud.