**Lane App Functionality/Flow:**

* **Scrollable lane box:**
  + Ability to select time range (day, month, year, user defined range)
    - Scroll bar at the bottom lets you move horizontally
  + Ability to hover over assigned tasks to view important details
    - Task Name
    - Start/end time
    - Length
    - Etc. \
  + Ability to scroll through the full list of all the lanes if there are too many to fit in the window
* **Unassigned Tasks:**
  + Ability to scroll through the list of unassigned tasks in a box on the right
  + Unassigned Tasks only have a length
    - Start and end date/time determined when you add it to a lane
  + Drag and Drop unassigned tasks into a lane at a specific time possibly add animation to show where you are adding it to
    - Popup Input box to Add Task name after dropped into a lane
  + Click on an unassigned task to reveal a pop-up box
    - Enter Task Name
    - Select desired start or end time
    - Drop down box populates with lanes that have space to fit the task given the start/end time specified
      * If no start/end time all lanes with enough space to fit the task are in the drop-down selection
* **Assigned Tasks:**
  + Behave the same as unassigned tasks (drag/drop, drop-down) so it can be moved to a different lane or time slot
  + Lane takes note that it has a task filling the time slot where the task is
* **Add Task Button (Unassigned Box):**
  + Button which pops up a form which allows you add a task by length to the unassigned tasks box
* **Add Task Button (Lane Box):**
  + Button which pops up a form which allows you add a task by details directly to a lane
  + Maybe tasks added in this way are immovable by the GA (this might not be necessary)
* **Add Lane Button:**
  + Button which pops up a form which allows you to add a new lane to the lane box and give it a name
* **Optimize Button:**
  + Optimize button will run a GA to fit every task to a lane and minimize (either number of lanes used or end time or both???)

**TODO:**

* D3 interface for the chart
* addTask button 🡪 sends form data to json file on the server
* addLane button 🡪 sends form data to json file on the server
* optimize button 🡪 solve with GA on server and receive updated JSON file with optimal values

**Things I need to Figure out:**

* Python Django for backend
* Future problem, but the user should be able to login to save/load their json file otherwise the entire website is going to be the same Gantt chart
* Should the JSON file just be a database which gets queried?