REQUIREMENTS

High-Level Design

- **(M)**Database from SQL - Using SQL as our main database to store necessary information based on the user's activities.

- **(M)**User interface - Our user interface will include a user login screen, allow the user to view all museum activities and events, suggest a different play for each parent based on age, give the user an option to change the website's language, and view other information related to the museum such as their podcast.

- (**M**)HTML through Django - Using Django as both a backend and front end. Will be using the Template function within Django to display HTML docs that we created for the main displays

- **(M)**Digital design - For our digital design we are going to be basing our visuals on the website shared with us by the museum called vroom. Our initial page will be similar to vroom, and we want to include a login screen that allows parents to select which kid they want to do activities with for the day, and give recommendations based on the children's age range. Connected to the login page will be a registration for parents who have not yet created a profile for their child, and we plan on offering a "sign in via google" option as well. There will be a continue as guest option for parents who don't want to make an account. Other parts of our digital design will include a calendar with current and future events offered at the museum, a list of the different activities and possibly a photo gallery showcasing the major exhibits.

- **(M)**Admin interface - Our admin interface will include a variety of features. The admins will access this interface using an admin-specific username. Once logged in, The admins will be able to adjust the layout of the page to their liking(GUIS) and will be able to adjust the text on the page as necessary. Some other features would include changing text font, text color, etc. We will add more features as we discover the needs of the clients.

- **(M)**Data collection - For data collection, we are going to try and capture as much data as we can. We want to see how long the user spends on each activity, the age of the user, and other data wanted by Dr. Blessing. We will know everything we're collecting once the museum sends us a list of the data they want us to collect.

- **(M)**Hardware Platform - Web application (All devices have access) - Our clients said they want the application to be accessible by everyone no matter the device, and asked us to accomplish this by creating a web application that would fit for each device.
- (**S**)Login security - For security, we plan to give the user two options, a login option, and a continue as guest login. For security regarding the login part, we currently plan to use Google login, so most of the security on that end will be with Google. For the "continue

as guest option," we will still record the user's activity on the app, but no personal information about the user will be stored for privacy and security reasons.

- (**S**)Model Type: KANBAN - We are using the KANBAN type because it is simple and easy to keep the team on the same page regarding what needs to be done.

- **(C)**Calendar - Will import or create our own calendar that will display events and information about the museum, and will be able to be edited by the admin.

Low-Level Design

- (**C**)Sign in via Google for security reasons - Plan to implement this by including the "sign in with Google" button that you see commonly on other websites that require a login.

- (**S**)Guest login doesn't track progress on the app(still keeps track of how long guest is in certain tabs) - When continue as a guest is clicked, a random username will be created for them (i.e a profile pic, or a name like "guest-4156") This will enable the data to be stored and sorted in the database, without needing the user to log in or worry about their personal info being leaked or stolen.

- (**M**)Two databases with multiple tables on SQL
- (**S**)Exhibit Class
  - Exhibit name
  - Floor level
  - information

- (**M**)Admin interface accessible through Admin login
  - Text Theme -The admin will be able to select the desired text and click a drop-down box including a wide variety of fonts to choose from.
  - Logos - The admin will be able to select a GUI that holds the current logo, and upload a PNG or similar file from their computer to import the logo they would like.
  - Text - The admin will be able to click on a text box and edit the text within as they would like.
  - Colors - We will create the website with a color theme similar to a museum to start, but Admins will be able to select bodies of text, background, etc, and select from the dropdown list of colors to change it to.
  - The layout of the page - The admin will be able to edit the layout of the page as they see fit using a GUI-type format. The Admin will be able to just drag and drop text boxes, logo(PNG) boxes, etc to wherever they they see fit on the web application.
  - (**C)**Add to calendar - We will allow admin users to make changes to the calendar implemented into the website. If any events/exhibits or information need to be removed or added to the calendar, the museum staff will have the option to make those changes.

    - Save button to apply changes - Have a button that when pressed will apply all changes made by the admin. If the admin terminates the process without pressing the save button, all changes will be reverted back to how they were prior to the admin making changes.

- **(S)**Icons designed on Adobe Illustrator (jpg files)

- **(C)**Destination/Location class – are the users at home or are they at the museum while using the app(Maybe) - Determine if the user is at home or at the museum based on what they select after logging in, and display activities and information best fit for the location.

- **(C)**Admin Class(maybe) - For our admin class, we want to allow the museum employees to sign into the website and make changes to the events and exhibits. Because they're not tech-heavy, we want to make it easy to edit for non-programmers but also have to make it harder for them to alter certain parts of the website so they can't break or ruin any features. As well, they will be able to see the data that's collected so they can use it for their research.

- **(M)**User Class
    - Username/PFP - Users can select their username and profile picture for their account. If they have already created an account, this will show the login options for their account.
    - Age Range - Users will select the birthday of their child when creating an account, or if they sign in as a guest. Guest sign-in will not save information, but this information will be stored for users who create accounts. Birthday will be used so it can make different age recommendations as the child gets older.
    - Gender - Users will select their child's gender which will be used for data collection. If a user continues as a guest they will input this information every time they login. If they create an account, they will only input once.
    - Admin - (True or False) - User will select if they're an admin or user, and there will be a passkey that can be entered to create admin accounts and prevent non-admins from creating admin accounts.
    - Location of the app being used(i.e. at home or at a museum) - Users will select whether they're signing in from home or the museum, which will allow for different activities to be recommended based on the location.
    - **etc(add as needed)**

- **(S)**Profile Class
    - Very similar to the User class
    - (**C**)Username/PFP
    - Age range
    - Gender
    - **etc add as needed**