django-interactive

Team 71 - Final Project, Sprint 2
15-437 Web Applications Development

Project

Django library for creating view hierarchies and auto-generating corresponding client-side methods in your project.

Primary Objective

Reducing the application development time by auto-generating the common connections between the client-side and the server-side.

Sprint 2

- **Creating a URL and action for `html_...` method**
  - `html_..` is supposed to return the up-to-date html string. Since our goal is to prevent user from manually doing this, we will need to dynamically create a url, and action methods that are mapped to these urls.

- **Creating a URL and action for `json_...` method**
  - `json_render_list` is supposed to return JSON representation of the context values. This will be hard because we have no idea about the type of the variables. They might be plain dictionaries or query sets. We need to write a robust checker that recursively goes through the variables and decide how to serialize them.

Sprint 2

- ## Creating a JS Stub generator
  - This is so that the framework auto generates the stubs for the necessary javascript functions as and when required. The stub generator will be in Python and it will generate JavaScript code. We need to come up with a good architecture for generating methods in general and then move on to implementing individual methods.

- ## Implementing the stub generator for `html_...` method
  - `html_..` method will send an AJAX request to the Django application and get back the HTML string. It is not supposed to do anything other than passing the string as a callback.

Challenges

- Meta programming is hard

- Have to autoload stubs on request

Looking forward...

- **Implementing the stub generator for** `reload_...` **method**

- **Implementing the stub generator** `json_...` **method**

- **Inject methods to HTML page**

- **Debugging and creating a sample application**

- **Registering the package with PIP registry**