

django-layout

a django library by Bhai Koders

Team 71 - Final Project, Sprint 1
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 1

- **Making a module that is installable by Django**
 - This feature will enable easy installation of the feature into the django framework so users can use our library from inside the Django applications. Once the user installs library, they can easily import the modules and start using the features of our in the application they are working. Because the installation is easy it decreases the effort required from the users end in setup and precious time and energy can be used to actually developing applications.
- **Creating the @page_view decorator**
 - This decorator identifies the method that is subsequently written as the one that renders an entire page. With this decorator in place, our framework can insert the necessary JavaScript stubs and necessary libraries. This also makes sure that similar stubs or same libraries are only injected in the page once.

Sprint 1

- **Creating the `@sub_view` decorator**
 - This decorator should take the name of the template and the context, and return the representation for `sub_view` so that the page views can render it, or helper methods (eg.json generator) can use it. For each subview, there are three JS methods generated.
- **Creating the ability to render subviews inside other templates**
 - This will allow developers to render subviews in different templates. It will give developers the flexibility to render swift views in different templates. We will be using "template_tags" to enable this feature. We really would like to refrain from forcing user to write `{% load ... %}` on top of every template, but it might not be technically possible.

Challenges

Enabling django templates to call other methods

Templates are designed to be static and work with only few templatetags.

Looking forward...

- **Creating a URL and action for `html_...` method**
- **Creating a URL and action for `json_...` method**
- **Creating a JS Stub generator**
- **Implementing the stub generator for `html_...` method**