

CS305 - Software Engineering

(High level design document)

YouTube API team

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1. Introduction

a. Definitions :

- i. Django - Django is a Python-based free and open-source web framework that follows the model-template-views architectural pattern
- ii. YouTube API - The YouTube Application Programming Interface allows developers to access video statistics and YouTube channels data
- iii. HTML - Hypertext Markup Language is the standard markup language for documents designed to be displayed in a web browser.

2. General Description

a. Tools used

- i. HTML for frontend - takes user input and provides results on the same page
- ii. Django in the backend runs this query in YouTube API and collects the required results and adds them to the HTML page.
- iii. YouTube API provides results from YouTube databases according to query.

b. Product Perspective

For the given user-input from the HTML page (Front-End), Django in the backend will search results for this input using Google YouTube API and these results will be displayed on a screen with the help of HTML and will also provide an option to switch on the YouTube page for the same input.

3. Design Details

a. Main Design Features

For User :

- i. home.html – screen to get input and display results from YouTube API

b. Component Diagram

