

# **SOFTWARE DESIGN DOCUMENT**

CS GROUP NO -02

UNRAVEL

<Version 1.1>

## Revision History

Revision History	Reason for changes	Version	Reviewer
15-10-2017	Formatting errors	1.1	Bhavana kurra Ujwal Tewari

## **Table of Contents :**

- 1.Introduction
  - 1.1 Purpose
  - 1.2 Scope
  - 1.3 Tools Used
  - 1.4 Intended Audience
- 2.System Overview
  - 2.1 User Characteristics
  - 2.2 System Objectives
- 3.Design Overview
  - 3.1 Approach
  - 3.2 Hardware Requirement
  - 3.3 Software Requirement
  - 3.4 Description of Modules
- 4.Low Level Designs
  - 4.1Activity Diagram
  - 4.2Data Flow Diagram
  - 4.3E-R Diagram
  - 4.4Use Case Diagram
  - 4.5UI Design

# **1 . Introduction**

## **1.1 Purpose**

A software design document is written by the system designers in order to give the team an overall guidance of the architecture of the software project.

## **1.2 Scope**

This document contains the low level design of application. The various modules have been identified and their interaction with each other is dened which enables the working of our system. The design of various modules outlined in this document builds upon the scope defined in the Requirements phase. This document will serve as a link between design team and coding team and will be frequently referred by coding team to build our system.

## **1.3 Tools Used**

- Dia
- Creately
- Latex

## **1.4 Intended Audience**

This document is for the developers and the technical team for reference during the coding and testing phase(Implementation Phase).

# **2. System Overview**

## **2.1 User Characteristics**

- Language Proficiency - Can read/understand/write English
- User has basic knowledge of using a computer or a smartphone and use a browser.

## **2.2 System Objectives**

- Login
- Signup
- Search and watch video
- Search and study projects
- Search and browse playlist

- Watch playlist
- Watch previously watched videos(logged in users)

## **3. Design Overview**

### **3.1 Approach**

The application will implement the following functionalities.

- User have their own account.
- User can watch video lectures
- User can access projects
- User can access playlists.
- Registered user can like and comment on a video or playlist.

### **3.2 Hardware Requirement**

The user only requires a Computer or a smartphone with a browser and internet access to use the application.

### **3.3 Software Requirement**

We are using Django framework for the backend development and are using PyCharm as the IDE and sublime text for front end development .

Android studio for app development.

Android SDK's are required.

### **3.4 Description of Modules**

#### **• Login/Logout/Signup :**

In order to store the user history and playlist watched by the users it is necessary for our system to have a way to link the user and his data. For this we have made user registration by which we can collect the information relevant to one user by asking them to Sign up. A user is authenticated via email verification. To login they must provide their username and password.

#### **• Search Video :**

The user will want search for videos to watch to. They will use the search bar

of the system to search for the video which will use a YouTube search to retrieve the results.

- **Search Playlist :**

The user will want search for playlists to watch to. They will use the search bar of the system to search for the playlist which will use a YouTube search to retrieve the results.

- **Search Project :**

The user will want search for the project/code. They will use the search bar of the system to search for the project/code which will use a Github search to retrieve the results.

- **Watch Video :**

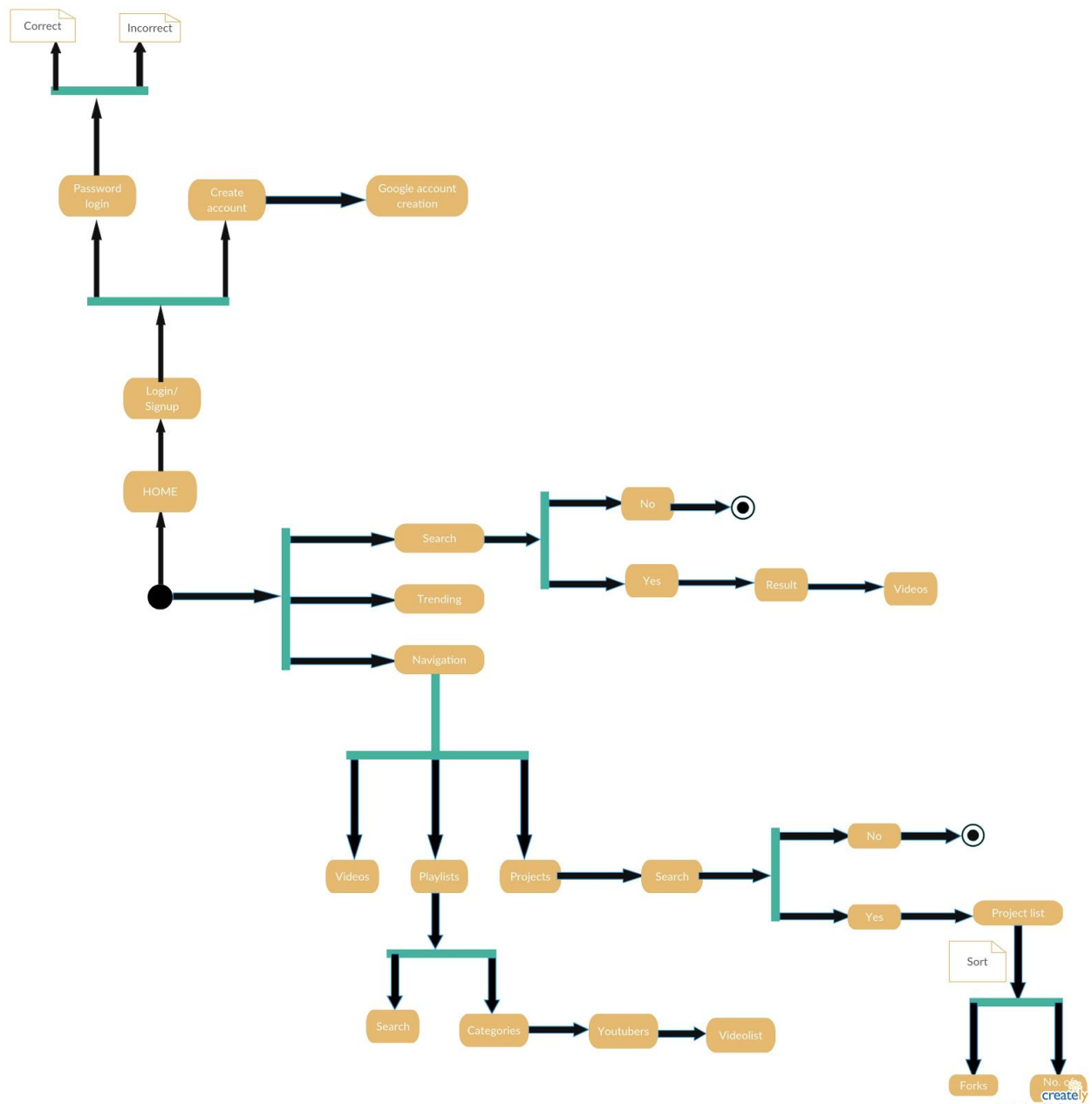
To watch a particular video the user can click/tap on the video.

- **View Project :**

To view a particular project the user can click/tap on the desired project which will redirected to the given Github page.

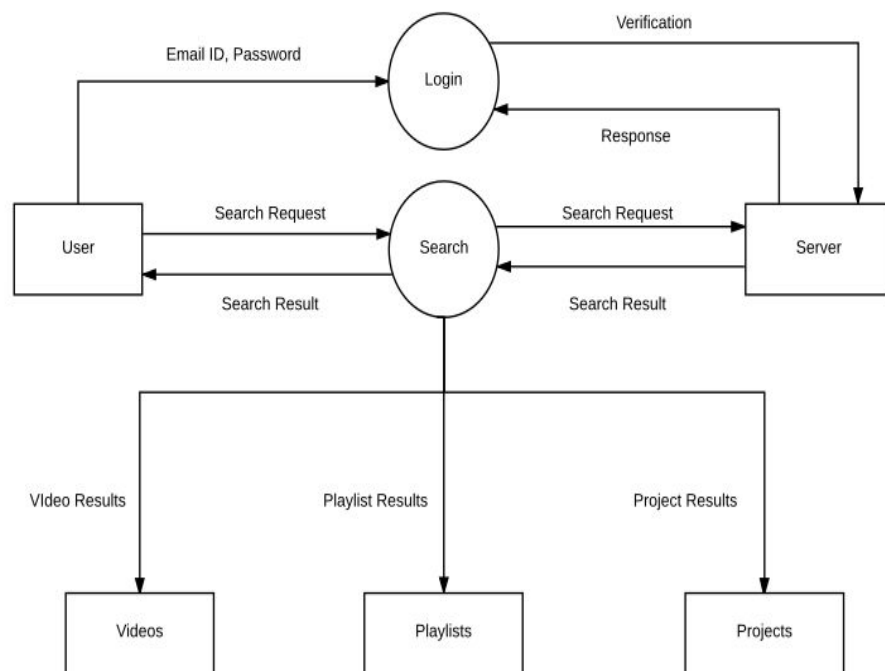
## 4.Low Level Designs

### 4.1 Activity Diagram



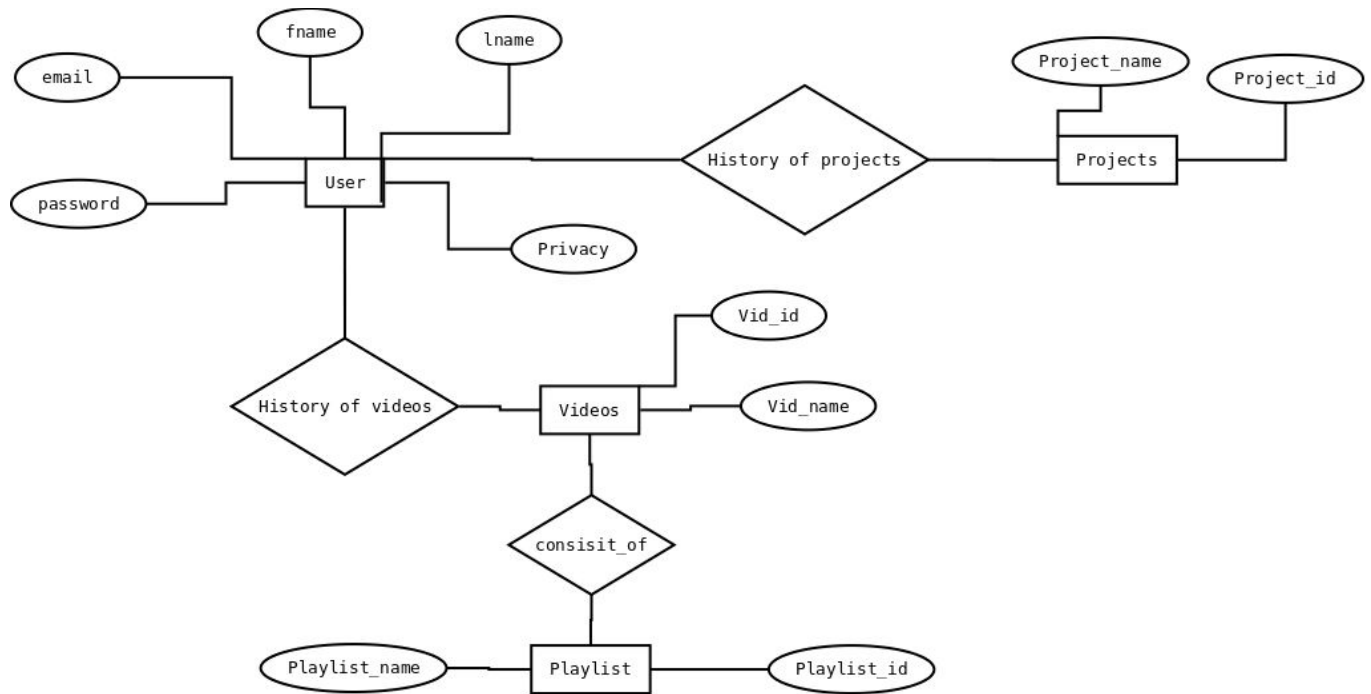
## 4.2 Data Flow Diagram

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## 4.3 E-R Diagram



## 4.4 Use Case Diagram

