**SMART TV WEB INTERFACE**

**Introduction**

A Smart TV, also known as a connected TV (CTV), is a traditional television set with integrated Internet and interactive Web 2.0 features which allows users to stream music and videos, browse the internet, and view photos. Smart TV is a technological convergence of computers, television sets and set-top boxes. Besides the traditional functions of television sets and set-top boxes provided through traditional broadcasting media, these devices can also provide Internet TV, online interactive media, over-the-top content (OTT), as well as on-demand streaming media, and home networking access.

Smart TV should not be confused with Internet TV, IPTV or Web television. Internet TV refers to receiving television content over the Internet instead of traditional systems such as terrestrial, cable and satellite, regardless how the Internet is delivered. IPTV is one of the Internet television technology standards for use by television broadcasters. Web television is a term used for programs created by a wide variety of companies and individuals for broadcast on Internet TV.

In smart TVs, the operating system is preloaded or is available through the set-top box. The software applications or "apps" can be preloaded into the device, or updated or installed on demand via an app store or marketplace, in a similar manner to how the apps are integrated in modern smartphones.

The technology that enables smart TVs is also incorporated in external devices such as set-top boxes and some Blu-ray players, game consoles, digital media players, hotel television systems, smartphones, and other network-connected interactive devices that utilize television-type display outputs. These devices allow viewers to find and play videos, movies, TV shows, photos and other content from the Web, cable or satellite TV channel, or from a local storage device.

**Functional Requirements**

* **Login Service**
  + Purpose
    - Allow the user to do the login to access the portal
  + Input
    - Enter username and password
  + Output
    - On correct input the user will be redirected to the portal
    - On incorrect the user will see the pop up for invalid credentials
* **TV Series**
  + Purpose
    - Allows the user to go through the various TV-Series
  + Input
    - Hover over the desired series
  + Output
    - The details of that series can be seen
* **Movies**
  + Purpose
    - Allows the user to go through the various Movies
  + Input
    - Hover over the desired movie
  + Output
    - The details of that movie can be seen
* **Channel**
  + Purpose
    - Allows the user to go through the various Channels
  + Input
    - Hover over the desired channel
  + Output
    - The details of that channel can be seen
* **Play Back**
  + Purpose
    - Plays the video from the collection
  + Input
    - Click on the page and the required buttons.
  + Output
    - The clips will be played accordingly

**Non-Functional Requirements**

* **Scalability**
  + Used the API’s to make sure that the application can expand in future.
* **Security**
  + Used the proper encryptions to secure the links, apis, and data which is getting stored in the database.
* **Flexibility**
  + Dedicated code place where the api’s can be added easily and the configuration maintainability is easy.

**Testing**

* CORS Access tested
* Login Page Authenticated tested
* Sessions Implemented
* API’s authenticated and tested

**Technologies Used**

* Nodejs
* React
* Mongo DB
* Redux
* Web Technologies (HTML,CSS,JS)

**Conclusion**

The Market Share of Smart TV is increasing yearly and will continue to rise as more and more people are getting connected to the internet and internet is getting cheap.

This project should help the business get more happy customers with Its captivating UI and features.