NASA SPACE APPS 2020

AARUUSH'20

BABY YODA : Orbit - X

Track : CONNECT
Challenge : ORBITAL SKY

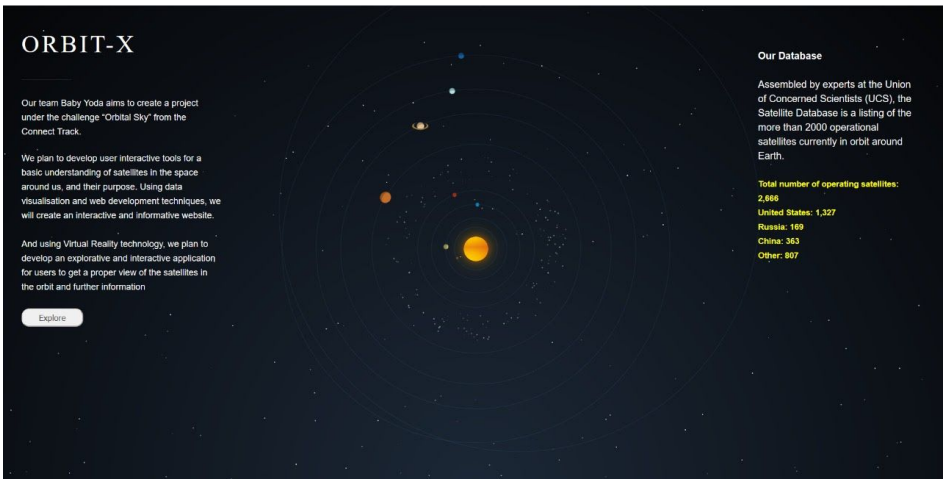
We have started creating a web application and a 3D interactive model for the challenge "Orbital Sky". Our aim was to create user interactive and informative applications for users to understand the satellites around the earth better. Find the code in the github repository and a few screenshots of the progress so far below in the report.

Github Repo : https://github.com/ikoojoshi/orbit-X

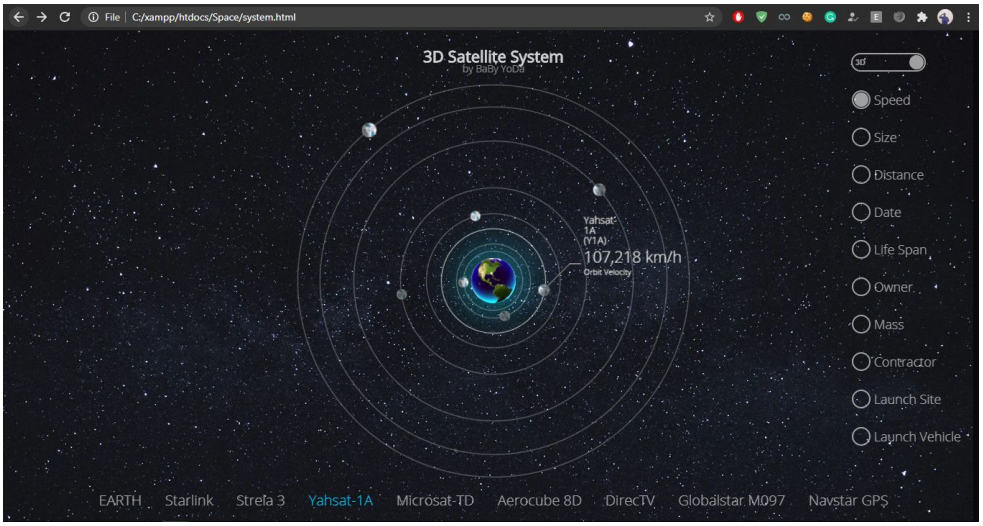
Database used :
https://www.ucsusa.org/sites/default/files/2020-05/UCS-Satellite-Database-4-1-2020.txt

1. Web Application

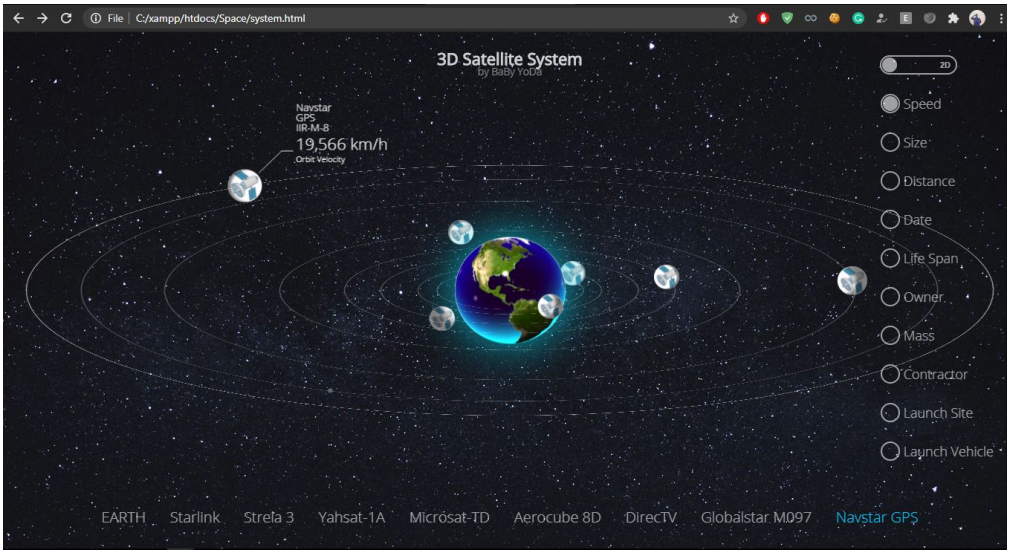
Using HTML5, CSS3 and Javascript, we created some interactive models to view satellites around the earth in the form of a website. Below are the pictures of our progress so far :



Landing page to the website



View of a few selected satellites around the Earth



A 3D view of the 2D model above

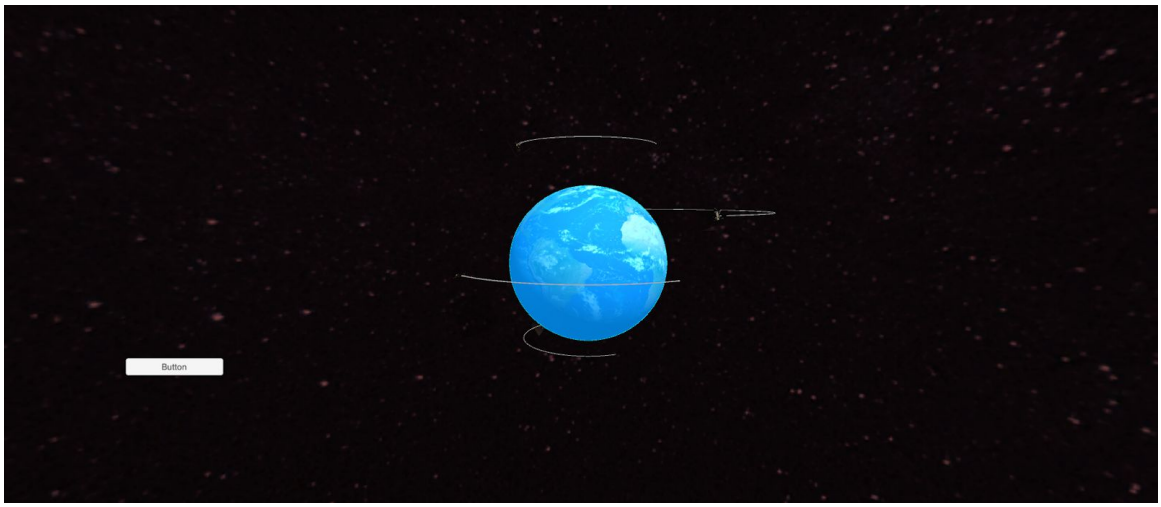
We further plan to make the data accessible on the website in a more interactive and informative way for the users to understand and search better. React.js framework would be used for the same.

We also plan to analyse the data further and create visualisations offering better understanding to the user using d3.js

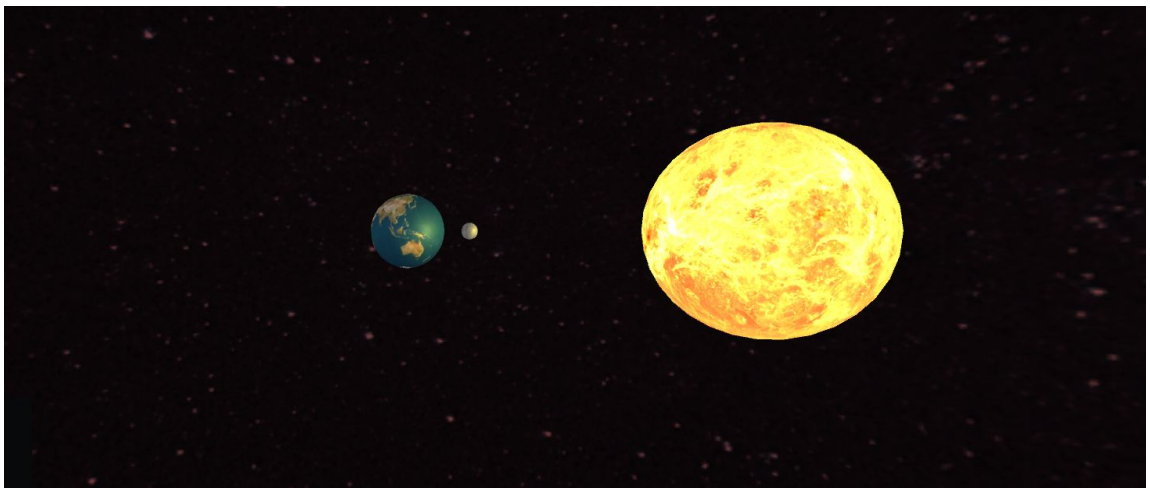
2. 3D model

A 3D model is created using Unity software to offer a better visualisation of our solar system and the satellites orbiting around our planet to the users. We are trying to increase the user engagement in the software whilst offering most information as possible.

A few screenshots of the progress so far :



An interactive 3D view of the earth with satellites revolving around



A 3D view of the Earth revolving around the sun