

Sky Scraping

A MINI-PROJECT SYNOPSIS Submitted by

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1. PROBLEM STATEMENT

To develop a website to fetch the latest astronomy pictures updated by NASA.

2. ABSTRACT

A Sky Scraper is a JavaScript-based projects which is data scraping used for extracting data from NASA websites. The goal of the project is to fetch the latest images and videos along with their information from NASA's websites. Many things become clearer when seen from above, and Earth is no exception. Images of Earth from space provide information that cannot be obtained any other way, and these images continue to make important contributions to science and commerce. The space station's unique orbit offers views that differ from those of traditional Earth-viewing satellites. HICO in particular gave scientists exceptional views of the coastal ocean and Great Lakes, thereby providing a tool for managing these critical resources. They used it to estimate chlorophyll-a concentrations (i.e., an indicator of both healthy and harmful phytoplankton), identify Harmful Algal Blooms (HABs) in drinking water reservoirs, and assess water quality. These data also contributed to planning and executing humanitarian relief operations and military actions, and identifying oil spilled from ruptured pipelines. HICO also created some unique challenges—in particular, processing the sheer volume of data. Typical analyses used for land-only and water-only images fell short in coastal zones; therefore, scientists had to develop improved algorithms. An ever expanding diversity and availability of remote sensing data—from the space station, small satellite constellations, and even drone technology—provide vast, complex data sets, and also drive a need for data processing advances. Although previously, only experts in the field performed capture and analysis of Earth images from space, big data has made its way into the hands of the larger community. Making this wealth of information useful requires rapid innovation in computing technology.

3. INTRODUCTION

Web development is the work involved in developing a Web site for the Internet or an intranet. Web development can range from developing a simple single static page of plain text to complex Web-based Internet applications, electronic businesses, and social network services.

Hypertext Markup Language is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets and scripting languages such as JavaScript.

JavaScript, often abbreviated as JS, is a programming language that conforms to the ECMAScript specification. JavaScript is high-level, often just-in-time compiled, and multi-paradigm. It has curly-bracket syntax, dynamic typing, prototype-based object-orientation, and first-class functions.

NASA stands for National Aeronautics and Space Administration. NASA is a U.S. government agency that is responsible for science and technology related to air and space. Many people know something about NASA's work. But most probably have no idea about how many different things the agency does. Astronauts in orbit conduct scientific research. Satellites help scientists learn more about Earth. Space probes study the solar system and beyond.

3. SOFTWARE AND HARDWARE REQUIREMENTS

Software Requirements:

- Text Editor(Notepad, ATOM, etc..)
- Google Chrome(Version 80+)

Hardware Requirements(Minimum):

• Processor: 64 bit

• RAM: 2 GB

Hard Disk: 256 GB