
Software Requirements Specification For INSTANT SEARCH



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1. Introduction

1.1.1 Purpose

Instant-Search result page on an e-commerce website This project also includes a simplified version of the implementation that includes a few less filtering options and common Searching Algorithms . Instant search engine is a software system that is designed to search for information on the E-commerce Website or any other Sites . The search results are generally presented in a line of results often referred to as search engine results pages (SERPs).

Search engines are basically a web based tool that enables the users to find information on the Websites. SERPs is simply an acronym for Search Engine Result Pages. This page lists all the results found out for the particular query/keyword. Its simple; you enter your keyword (the word that you want to search for) and the Search Engines return with their list of websites that will provide you your desired results.

Instant Search Engines use different mathematical algorithms for generating Search Results. Different Search Engines perceive different elements of a web page including page title, content, meta description and then come up with their results to rank on. Search Engine's algorithm are different.

Instant Search is Fast and One time reloading page Search Bar of any website and give desired result as user want.

Instant search engines provide customized results based on the user's activity history. This leads to an effect that has been called a filter bubble. The term describes a phenomenon in which websites use algorithms to selectively guess what information a user would like to see, based on information about the user. As a result, websites tend to show only information that agrees with the user's past viewpoint. This puts the user in a state of intellectual isolation without contrary information.

1.1.2 Document Conventions

The document is written in Times New Roman. The main headings and sub headings are bold while the text are in normal font. The document uses various diagram to illustrate various functionality of the function. It is further divided into heading and sub headings to provide an introduction to the application. The best part of this document is that it simplifies the complexity of understanding the application. It can be substituted as a user manual for the application and can be used by company officials to get the best out of this application. The document relates the various parts of the application and coagulation between them. The diagrams use in this documentation connects the various phases of the application and are in accordance with the currently used diagrams methodology.

1.1.3 Intended Audience and Reading Suggestions

This document is intended for almost all type of users , such as developers, project managers, marketing staff, users, testers, and documentation writers.

The aim of this project is to build a Instant Searh which is intended to fast Search to any E-commerce Website or where Search Bar needed . Any E-commerce Site they can use this Search Bar for fast and reliable search for data set or include data set of own and this search bar give best result for any keyword .

1.1.4 Product Scope

This document specifies all the software requirements, along with the intended audience and the functionalities also.

The aim of this project is to build a Instant Searh which is intended to fast Search to any E-commerce Website or where Search Bar needed . Any E-commerce Site they can use this Search Bar for fast and reliable search for data set or include data set of own and this search bar give best result for any keyword .

1.1.5 References

Online sources: <https://www.joshmorony.com/category/nodejs-tutorials/>
<https://www.udemy.com/the-complete-nodejs-developer-course-2/>

Documentation : React js official documentation
Node Js official documentation
Express Js official documentation

2. Overview

Instant Search is a hosted full-text, numerical, and faceted search engine capable of delivering real-time results from the first keystroke. Instant Search powerful API lets you quickly and seamlessly implement search within your websites and mobile applications and delivering relevant results in under 100ms anywhere in the Website.

2.1 Customers

Everyone. Anyone can use this application ranging from a child to an old-age person.

2.2 Functionality

The primary goal of the engine is to find all items that match a query, then to order them from best to worst. We explain what relevance and ranking mean in many parts of our documentation, but the overriding principle is that Algolia uses a tie-breaking algorithm, using a variety of criteria, to weigh and compare matching items against each other. This ensures that the best matches appear at the top. The entire system that manages your data and search requests was built to ensure speed at every point in the processing workflow. For example, search requests always have priority over indexing operations, to guarantee an optimal experience for your end users.

2.3 Platform

It will be launched as a Web-based application and any one can access or use .

2.4 Development Responsibility

We, Shubham Jindal and Shubham Dudeja would be developing this application and are responsible for the creation of all the related stuffs.

2.5 Design and Implementation Constraints

The implementation of the project is done in latest Javascript ES6 Standards considering

the future prospects of the projects and if we want to migrate it over new Node Js version and also considering the possibilities of implementing the new features.

Also the development server we used is heroku which is most used server for Node JS

project in order to maintain its scalability and maintenance.

2.6 User Documentation

The application is in the development phase and there will be a user's manual once the application is deployed. The user manual will provide the various specification to the application and it will simplify the complexities related to the application.

2.7 Assumptions and Dependencies

The application is assumed to work on every operating system with browser. It is assumed that it will work on every device with a browser and internet connection. The application requires a stable internet connection. The application is assumed to work fine under all the severe condition like traffic loads or increased number of users.

2.8 User Classes and Characteristics

The anticipated users for the applications are:

The company: This application is intently designed for the requirements of a particular company. The company manages the backend database structure and its functionality. Every company requires a software to manage its services, our application simplifies the company's need of the software being readily available anywhere anytime to share your story.

The Developer: The developer will use the application to remove the bugs and to add new updates as company demands. The team will see the efficiency and the performance of the application when the application will be operated in the real time environment after the application is deployed by the company.

3. External Interface Requirements

3.1 HARDWARE REQUIREMENT

Hard-disk drive	20 GB Min 40 GB Recommended
RAM	512 MB Min 1 GB Recommended

3.2 SOFTWARE REQUIREMENT

Operating System	Windows , Linux , MacOS
Database	MS SQL or MongoDB
Technologies	ReactJs, NodeJs , Searching Algoritms
Programming Language	JavaScript , JQuery , AJAX
IDE	ATOM(An Open Source IDE)
Browser	Google Chrome 6 , Mozilla , IE

4 . System Features

- Full-JavaScript/frontend implementation based on EcmaScript 6
- Results page refreshed as you type
- Relevant results from the first keystroke
- Rich set of filters
 - Multi-level categories
 - Range slider
 - Star rating
- Typo-tolerance
- Multiple sort orders
 - By Relevance
 - By Highest Price
 - By Lowest Price
- Backup search parameters in the URL

5. Other Nonfunctional Requirements

5.1 Performance requirements

The important requirement is that the application should perform smoothly without any error. There should be no sudden breakdown of the application when the wrong input is fed. There should be no bugs once the application is deployed. Since the application is online the performance will not be affected by the increase in the number of users as the cloud has capacity to handle huge numbers of users at a particular time. Thus performance of the application can be degraded when the error is made while feeding the data or creating the validation rules.

5.2 Security requirements

The login credential of the users and system admin will be handled by the platform that uses the two step verification process for dataset . If the any one login from other system, he/she will be prompted will he security code that will be provided by the dataset on the Admin personal or registered email id. This security feature will provide a secure environment to the application and any hacking will be nullified. The platform further can't change any data in the database on its own as each dataset

5.3 Software quality attributes

AVAILABILITY: The application is available to every intended user who is having a proper connection and platform.

MAINTAINABILITY: The application need to maintained on regular basis to change the various values in the system for proper functioning of the system

USABILITY: The application should be easy to understand and operate. So that the person with basic knowledge of computing can use the platform without any problem.

ETHICALLY SOUND: If any keyword is found to be irrelevant or not sound on ethical grounds , then the administrator has full rights to delete the keywords.

6. Business Rules

The application is particularly made in compliance with company's requirements. The copy of the application should be made after notifying the concerned authorities that are indulged with this project.

7. Other Requirements

The other requirements of the project is getting to understand the UML diagram and understand it flow to get and idea of how the project works and its requirements.

