

CS6359 - Object-Oriented Analysis and Design

Cyberminer Project

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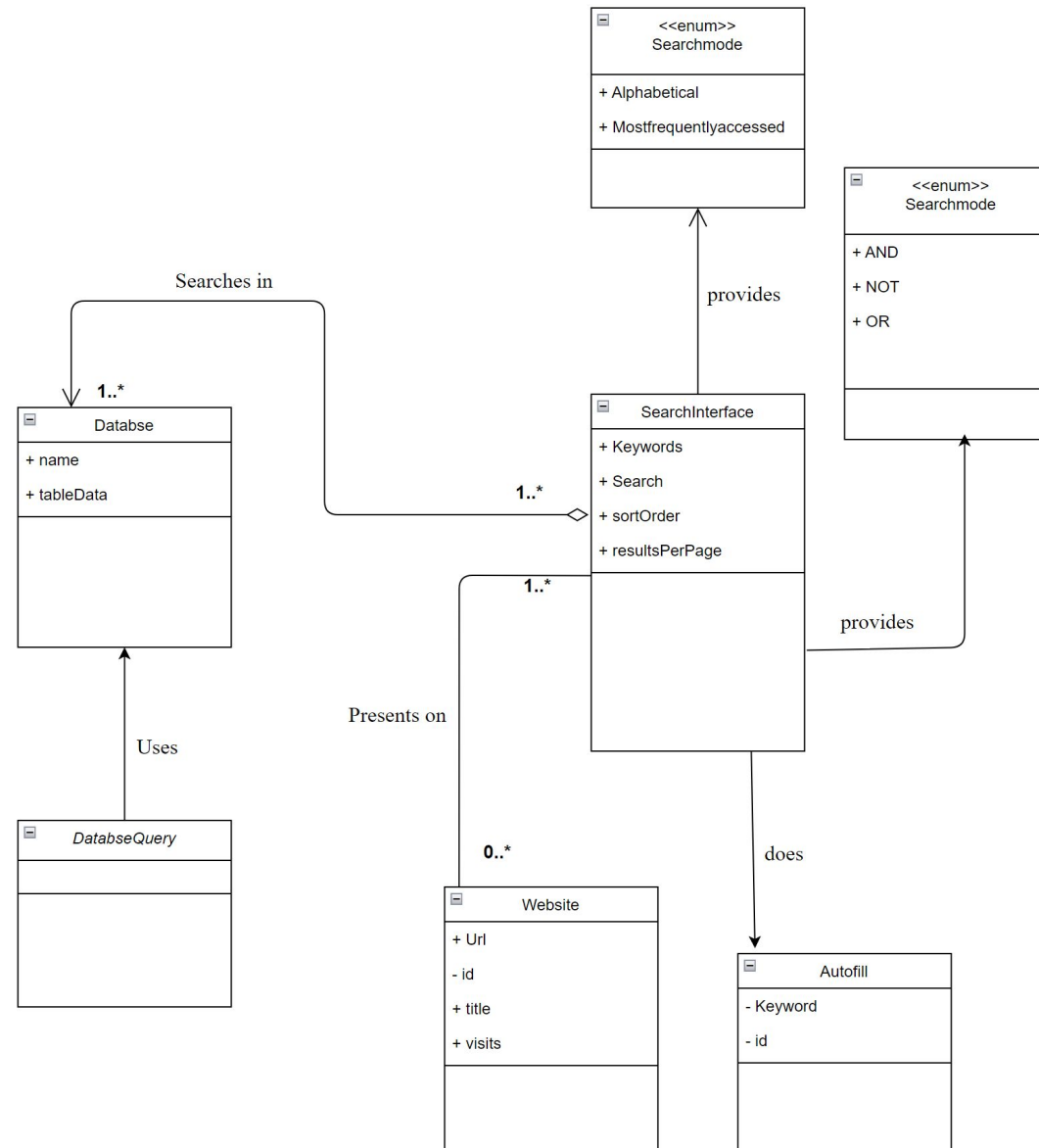
Team Distribution

Team	Members	Team Leader
Frontend Team	Rainam Shah Dhyani Gandhi AbhijeetSinh Vaghela Chenyue Li	Rainam Shah
Backend Team	Poojitha Bijjam Akash Karuturi Rohith Jallipalli Pavan Pabbisetty Yasaswi Devi Tiyyagura	Poojitha Bijjam
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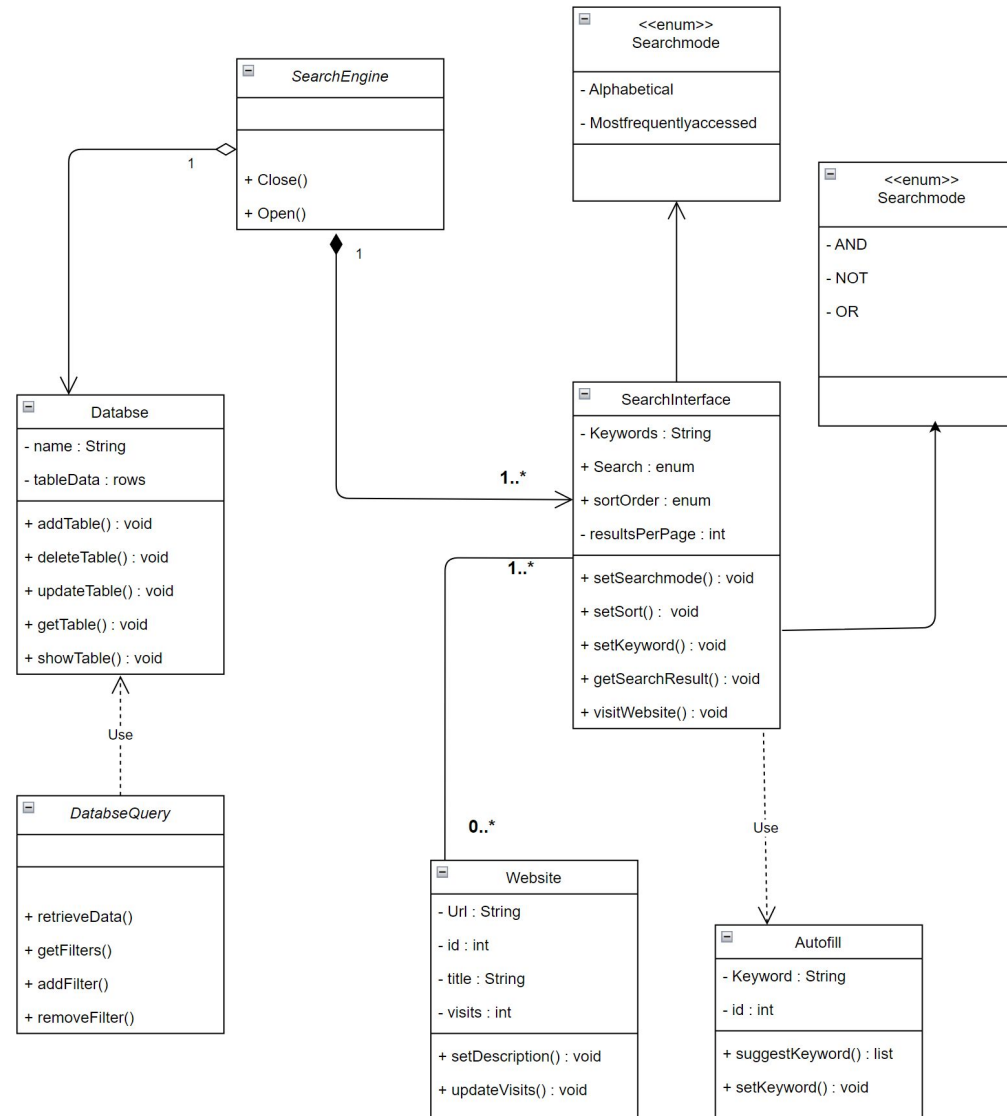
What is Cyberminer?

- Cyberminer is a search engine that accepts input and displays list of URLs, whose description or title matches to the input entered.
- It takes list of keywords through textbox in the user interface.
- It allows the users to specify the mode of search, using “OR”, “AND” or “NOT”.
- In output, it displays the list of URLs, titles and descriptions.
- It also can add, edit and delete URL from database.

Class Diagram Domain Model



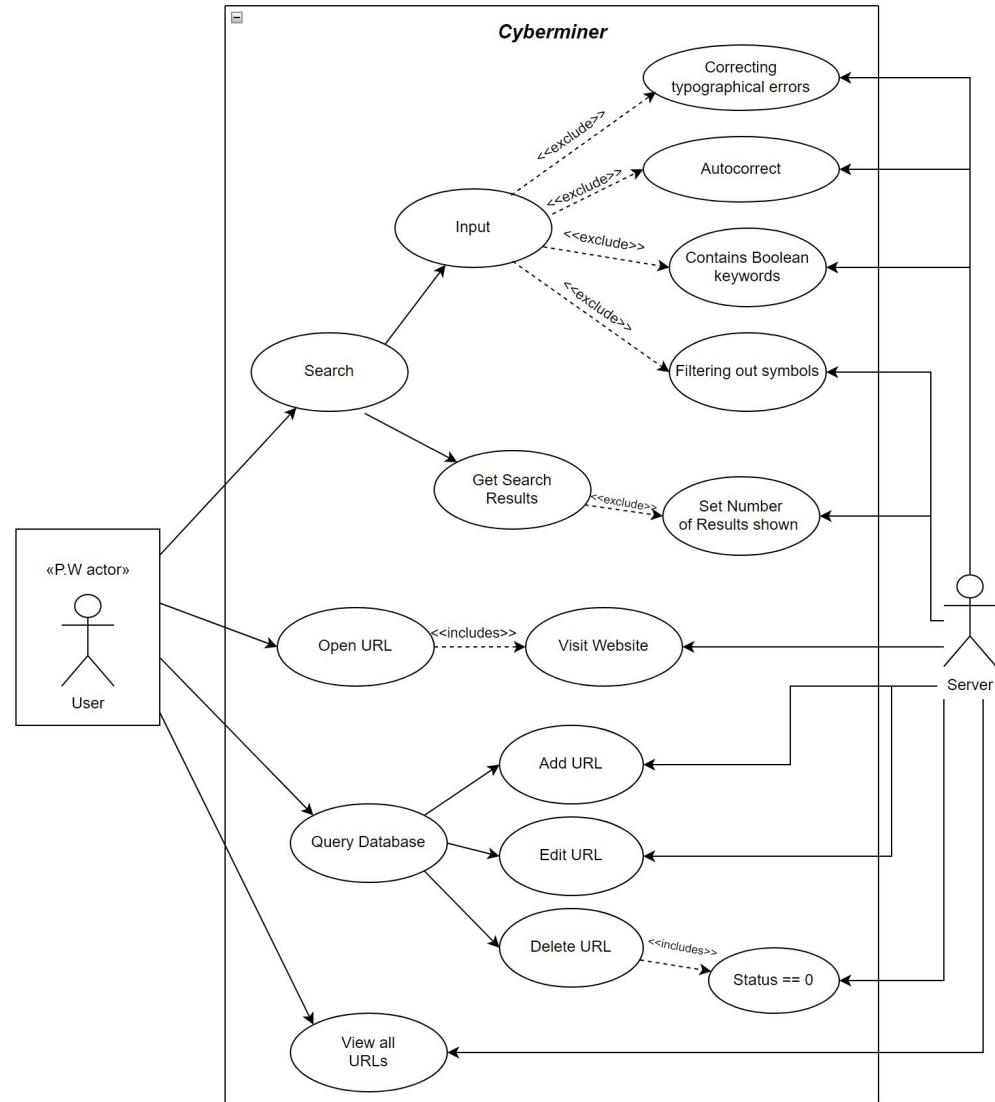
Class Diagram



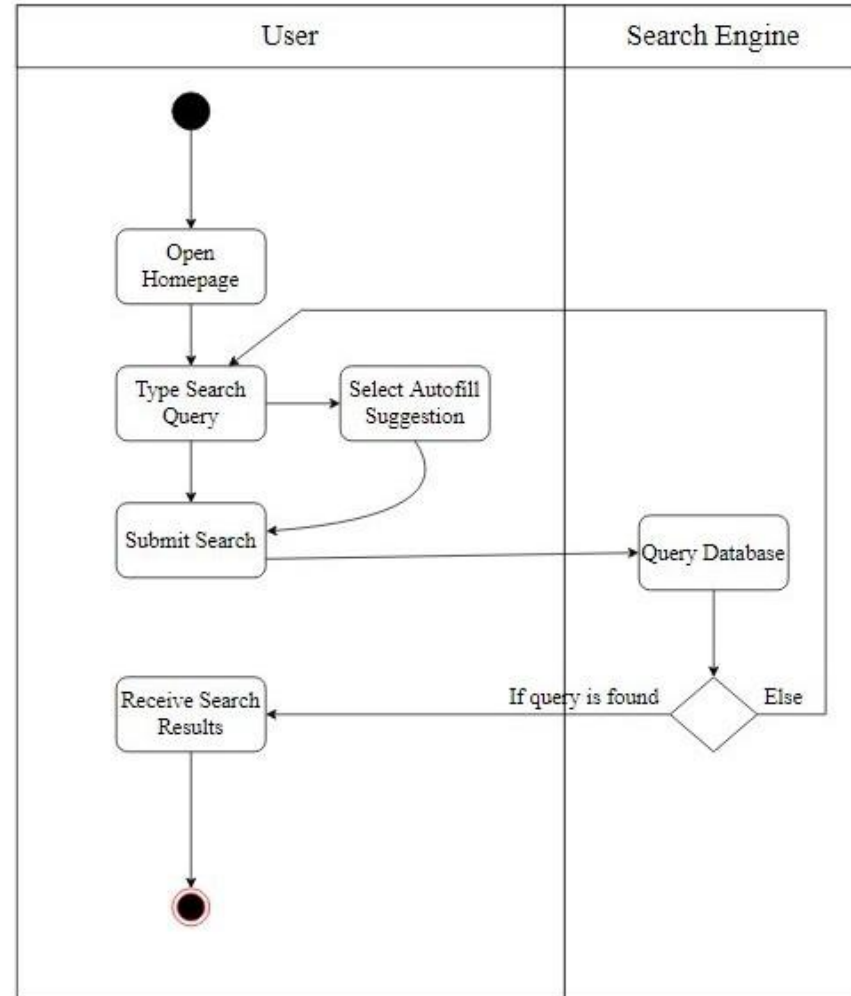
Use Case Template

Use Case	Description
Actors	User, Server
Description	User searches for query and system returns a lists of corresponding Titles, Descriptions, and URLs.
Main Scenario	<ol style="list-style-type: none">1. User enters a query.2. Search for a query in the database.3. Output corresponding Titles, Descriptions, and URLs.
Alternative Scenario	<ol style="list-style-type: none">1. If wrong query is searched, Show error.2. If query not found, show message and return to home page.

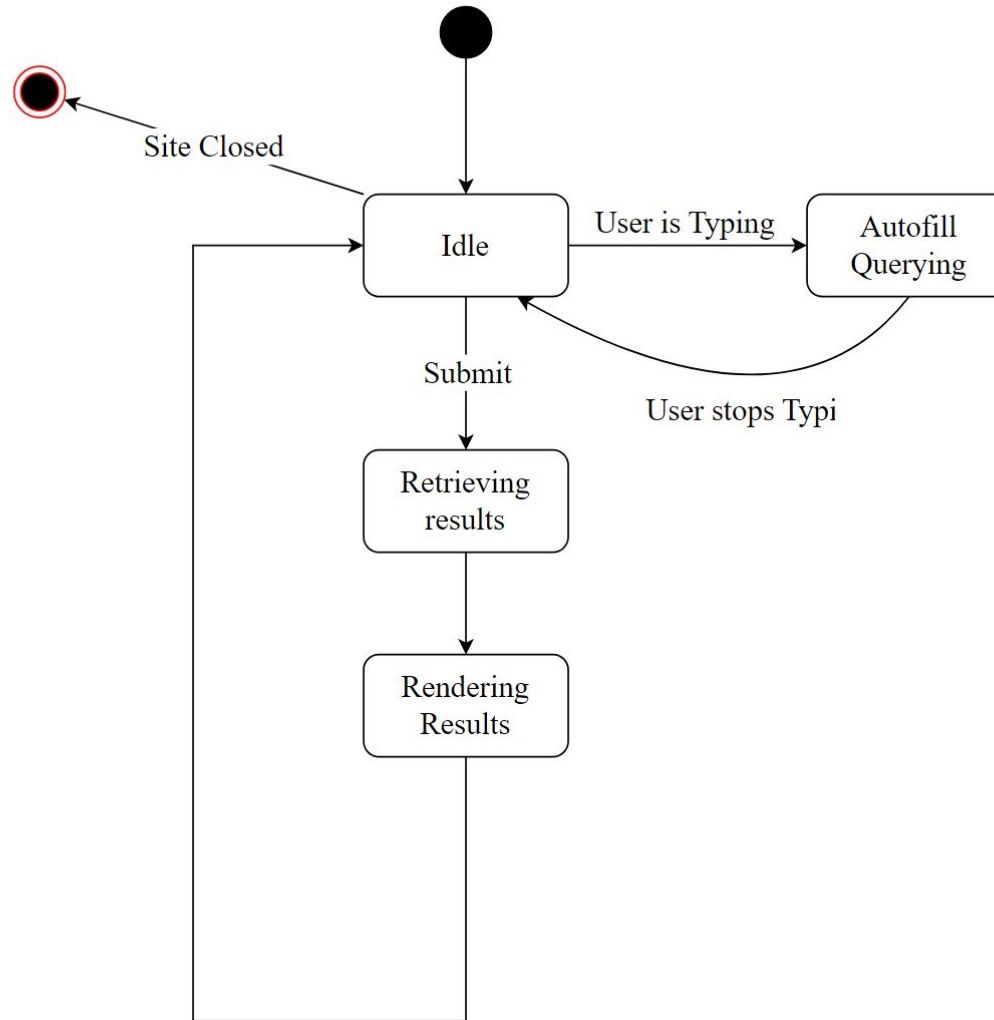
Use Case Diagram



Activity Diagram

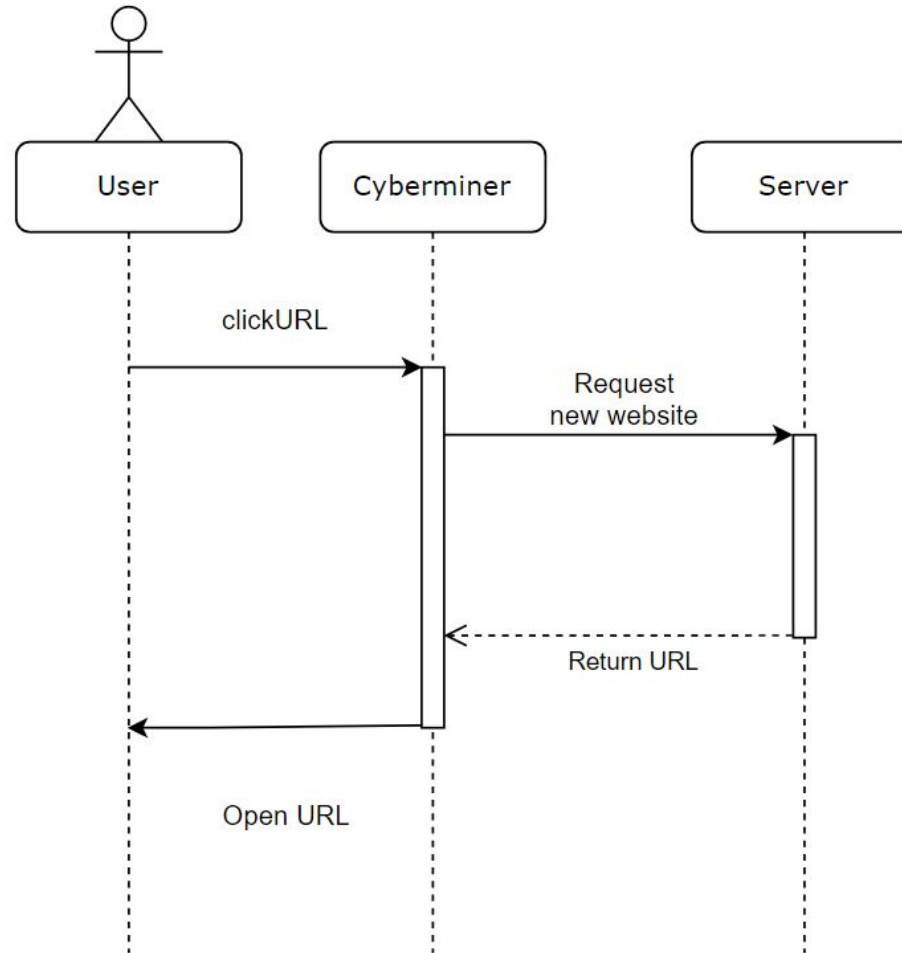


State Transition Diagram



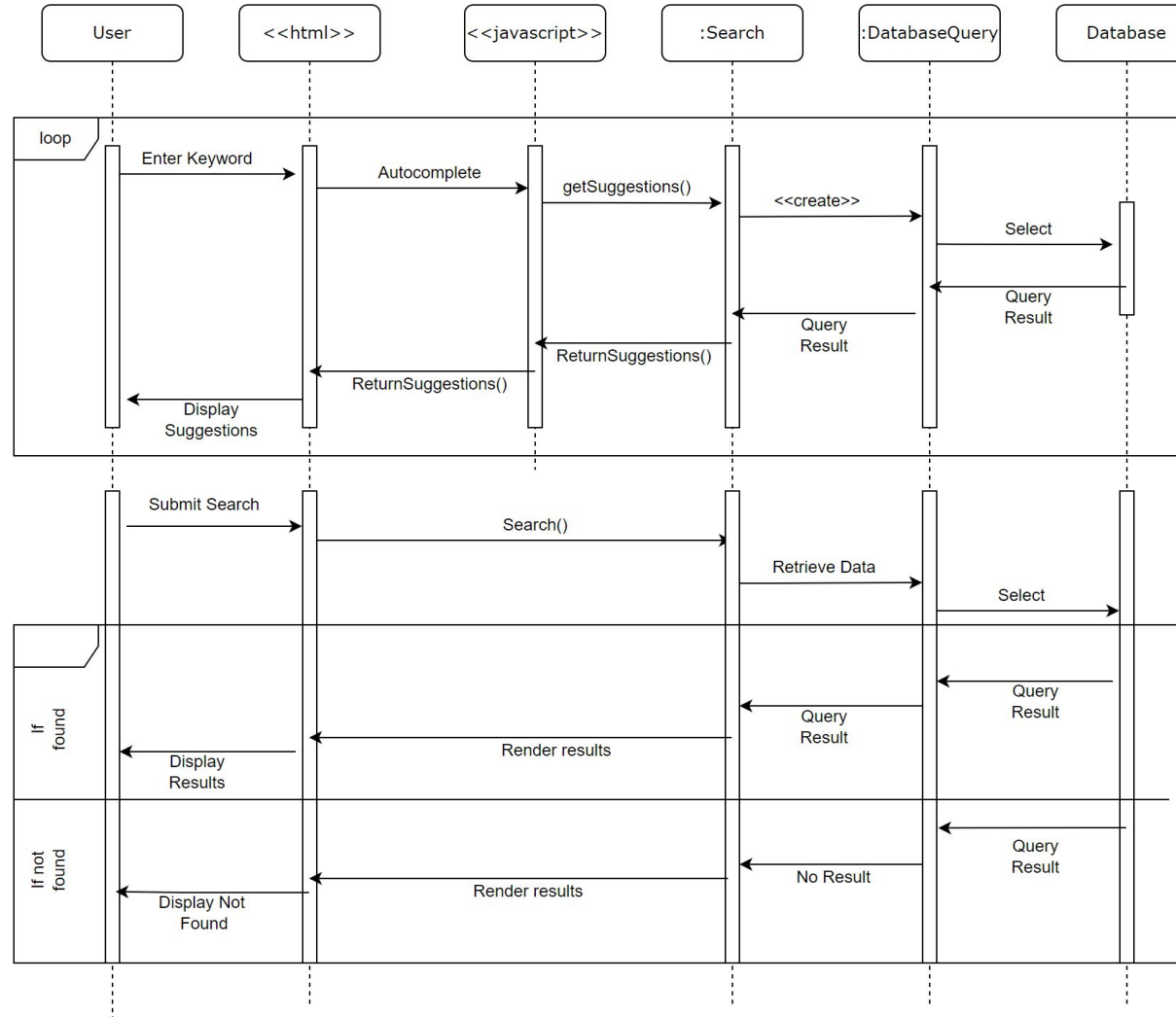
Sequence Diagram

Sequence Diagram for getting URL

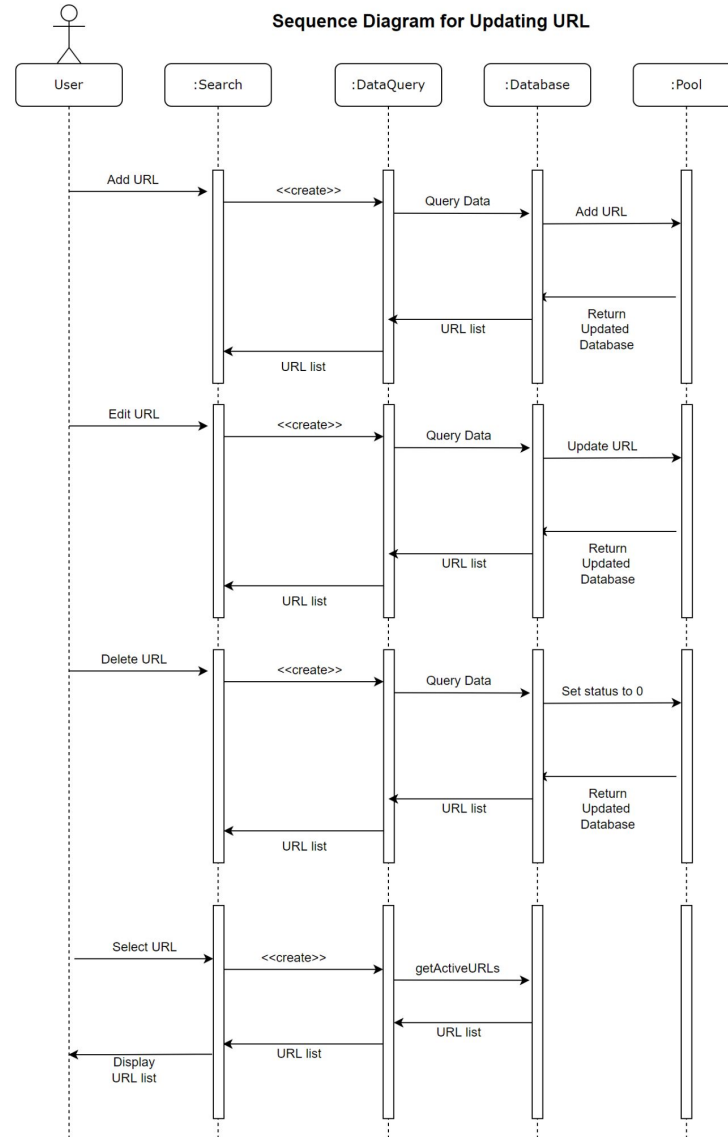


Sequence Diagram

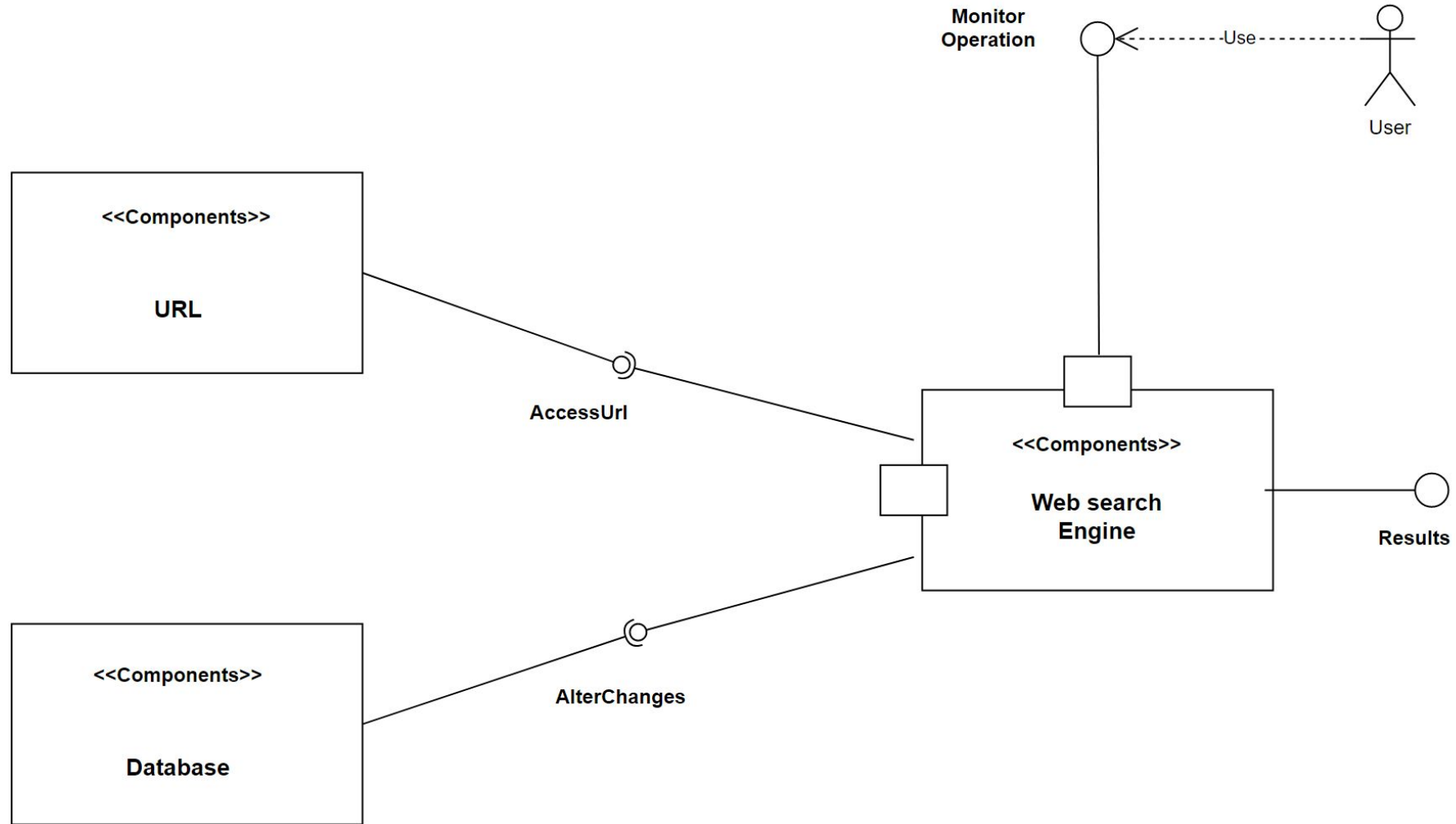
Sequence Diagram for Search



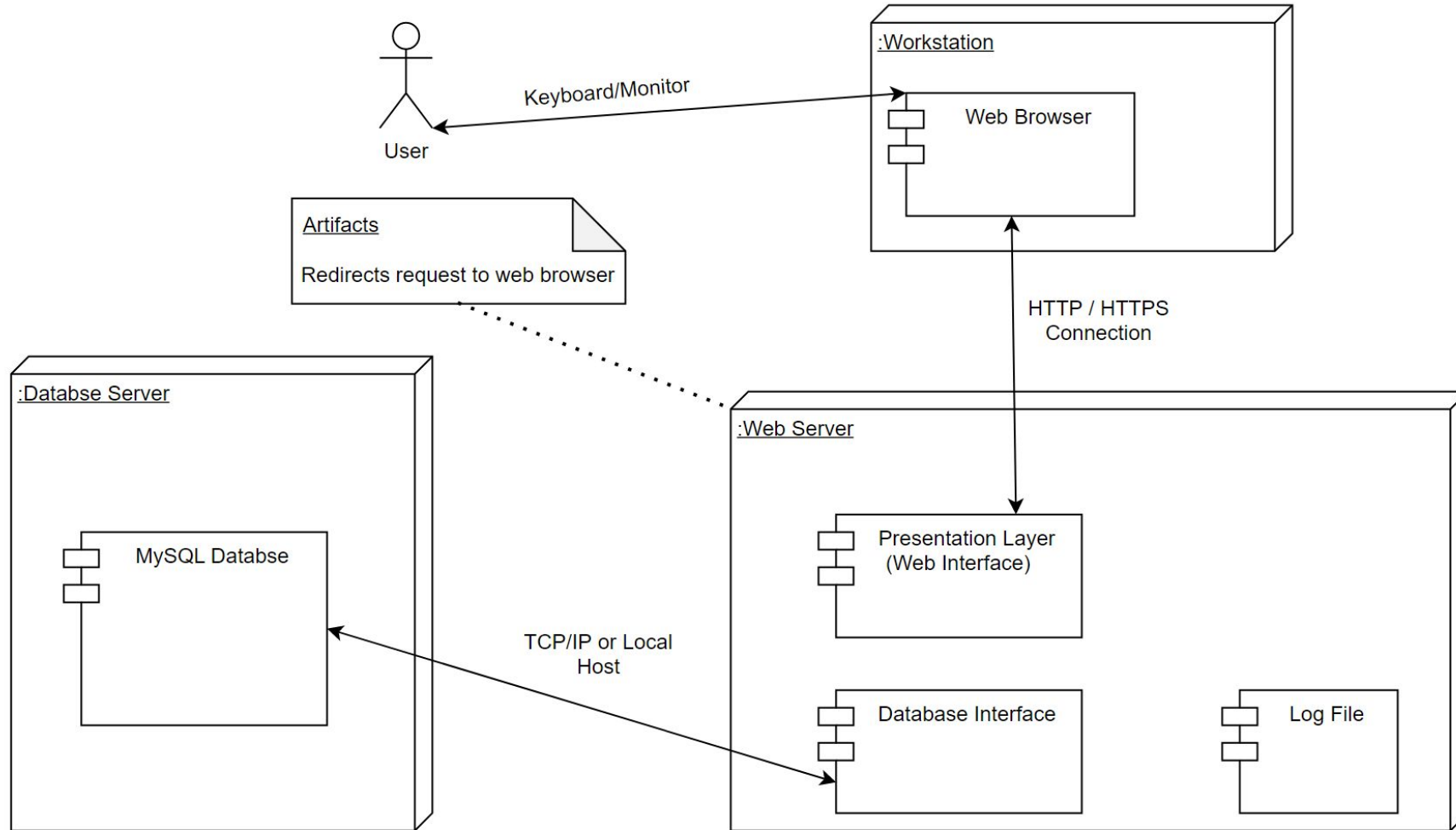
Sequence Diagram



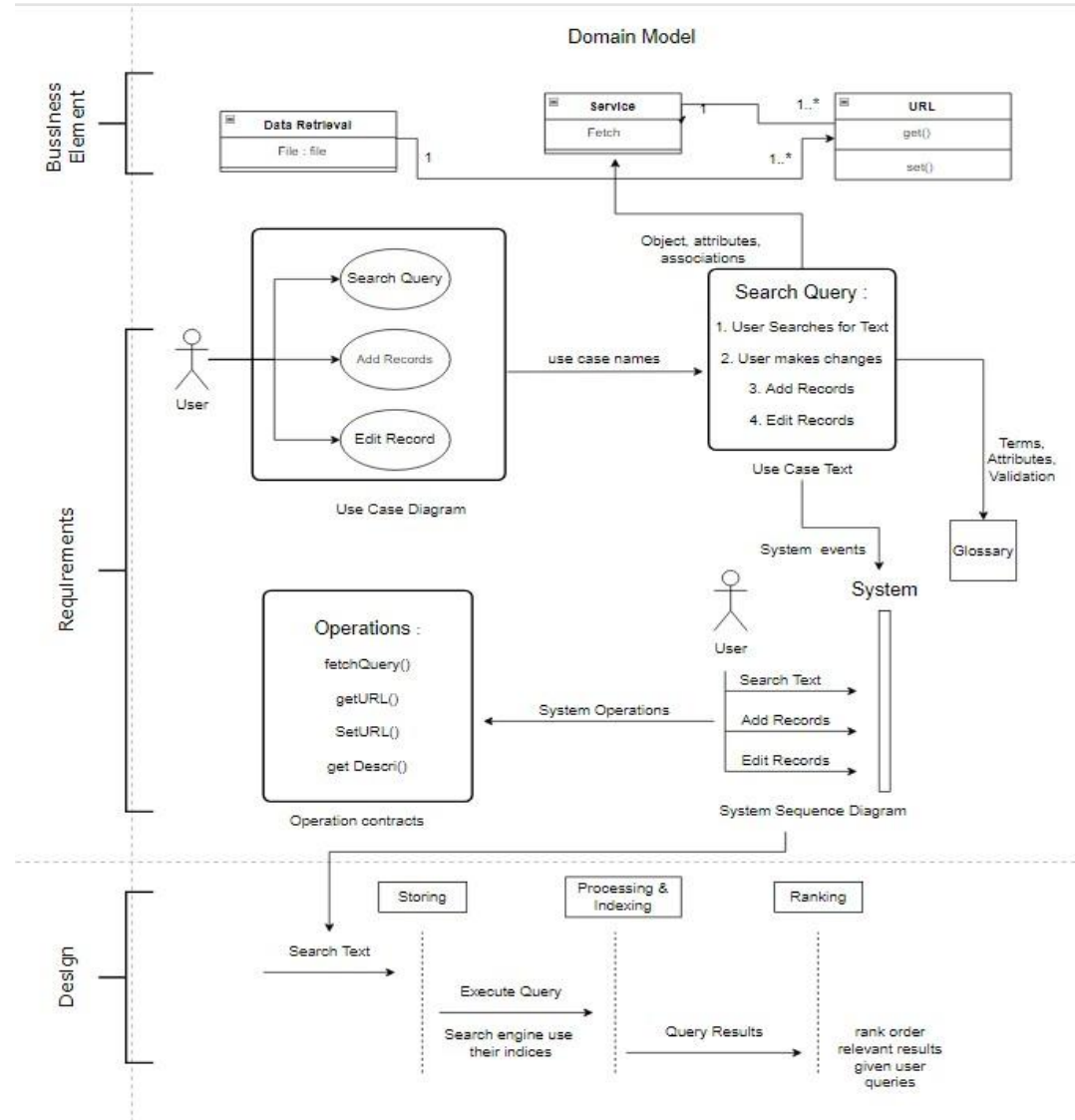
Component Diagram



Deployment Diagram



Road-Map Diagram



Functionalities Implemented

1. Word Search
2. Auto Complete
3. Binary Operations(OR, AND, NOT)
4. CRUD Operations

DB Operations

1. Create a record
2. Read the URL data
3. Update the database records
4. Delete a particular record

Front-end Implementation

- We have used React as the front-end framework.
- Specifying search mode: OR, AND, NOT.
- Listed the results in alphabetical order.
- User can view all the URLs and add, edit and delete the URLs from the database.

Test Case - OR function

- Functionality Description: When user enter two keywords connected with OR, it should search for records containing either of the two keywords in the description field and return as a list and display on the webpage.
- User Input: “Google OR youtube”
- Expected output: Display all records containing either “Google” or “youtube” as search keywords
- Actual output: Display all records containing either “Google” or “youtube” as search keywords
- Test result: Passed

Test Case - OR function

CyberMiner

Google OR youtube

Search

View URLs

<https://www.google.com/gmail/>

Gmail Google

Gmail is a free email service provided by Google. As of 2019, it had 1.5 billion active users worldwide.

<https://en.wikipedia.org/wiki/Gmail>

Gmail Wikipedia

A user typically accesses Gmail in a web browser or the official mobile app. Google also supports the use of email clients via the POP and IMAP protocols.

<https://www.google.com>

Google

Google LLC is an American multinational technology company that specializes in Internet-related services and products, which include a search engine, online advertising technologies, cloud computing, software, and hardware.

<https://about.google/>

Google About Google, Our Culture & Company News

Stay up to date with Google company news and products. Discover stories about our culture, philosophy, and how Google technology is impacting others.

<https://www.youtube.com>

YouTube

YouTube is an American online video sharing and social media platform owned by Google. It was launched on February 14, 2005, by Steve Chen, Chad Hurley, and Jawed Karim. It is the second most visited website, right after Google itself.

Test Case - AND function

- Functionality Description: When user enter two keywords connected with AND, it should search for records containing both of the two keywords in the description field and return as a list and display on the webpage.
- User Input: "Google AND youtube"
- Expected output: Display all records containing both "Google" and "youtube" as search keywords
- Actual output: Display all records containing both "Google" and "youtube" as search keywords
- Test result: Passed

Test Case - AND function

CyberMiner

Google AND youtube

Search

View URLs

<https://www.youtube.com>

YouTube

YouTube is an American online video sharing and social media platform owned by Google. It was launched on February 14, 2005, by Steve Chen, Chad Hurley, and Jawed Karim. It is the second most visited website, right after Google itself.

Test Case - Not function

- Functionality Description: When user enter two keywords connected with NOT, it should search for records containing the first keyword and not the second keyword in the description field and return as a list and display on the webpage.
- User Input: "Google NOT youtube"
- Expected output: Display all records containing only "Google" but not "youtube" as search keywords
- Actual output: Display all records containing only "Google" but not "youtube" as search keywords
- Test result: Passed

Test Case - Not function

CyberMiner

Google NOT youtube

Search

View URLs

<https://www.google.com/gmail/>

Gmail Google

Gmail is a free email service provided by Google. As of 2019, it had 1.5 billion active users worldwide.

<https://en.wikipedia.org/wiki/Gmail>

Gmail Wikipedia

A user typically accesses Gmail in a web browser or the official mobile app. Google also supports the use of email clients via the POP and IMAP protocols.

<https://www.google.com>

Google

Google LLC is an American multinational technology company that specializes in Internet-related services and products, which include a search engine, online advertising technologies, cloud computing, software, and hardware.

<https://about.google/>

Google About Google, Our Culture & Company News

Stay up to date with Google company news and products. Discover stories about our culture, philosophy, and how Google technology is impacting others.

View URLs Page

[Back to Search](#)[Add New Record](#)

Title	URL	Description	Action
Adobe Creative, marketing and document management	https://www.adobe.com	Adobe is changing the world through digital experiences. We help our customers create, deliver and optimize content and applications.	Update Delete
Adobe Developer	https://www.adobe.io	The most memorable digital experiences are unleashed by developer creativity. Adobe products and services empower developers.	Update Delete
Amazon jobs	https://www.amazon.jobs	Learn about Fulfillment center career opportunities, and see open jobs at our Amazon Fulfillment Portal. View fulfillment jobs ..	Update Delete
Amazon Spend less Smile more	https://www.amazon.com	Amazon.com, Inc. is an American multinational technology company which focuses on e-commerce, cloud computing, digital streaming, and artificial intelligence.	Update Delete
American Honda Motor Co Inc. - Official Site	https://www.honda.com	Explore an innovative line of quality products from American Honda Motor Company. Find the latest news and information on Honda and Acura brand products.	Update Delete
Bank of America - Banking, Credit Cards,	https://www.bankofamerica.com	The Bank of America Corporation is an American multinational investment bank and financial services holding company headquartered in Charlotte, North Carolina.	Update Delete

Test Case - Add Record

- Functionality Description: When user click on the Add New Record button on the View URLs page, it should open a modal and allow user to enter title, url and description for the record to be added. When click on the Add button, new record with entered details should be displayed within the record table.
- User Input:
 - Click on the Add New Record button on the View URLs page
 - Enter title, url and description for the record to be added
 - Click on the Add button on the modal
- Expected output:
 - Open the Add New Record modal with 3 input fields
 - Inputs are entered properly
 - Modal closes after clicking on the Add button, the new record should be displayed within the table
- Actual output:
 - Open the Add New Record modal with 3 input fields
 - Inputs are entered properly
 - Modal closes after clicking on the Add button, the new record is displayed within the table
- Test result: Passed

Test Case - Add Record

Back to Search

Add New Record

Title	URL	Description	Action
Adobe Creative, marketing and document management	https://www.adobe.com	<div>Add New Record</div> <div>Title: ReactJS Tutorial</div> <div>Url: https://reactjs.org/tutorial/tutorial.html</div> <div>Description: This is a good source to learn <u>ReactJs</u></div> <div><div>Add</div><div>Close</div></div>	<div>Update</div> <div>Delete</div>
Adobe Developer	https://www.adobe.io		<div>Update</div> <div>Delete</div>
Amazon jobs	https://www.amazon.jobs		<div>Update</div> <div>Delete</div>
Amazon Spend less Smile more	https://www.amazon.com		<div>Update</div> <div>Delete</div>
American Honda Motor Co Inc. - Official Site	https://www.honda.com		<div>Update</div> <div>Delete</div>
Bank of America - Banking, Credit Cards,	https://www.bankofamerica.com		<div>Update</div> <div>Delete</div>

We can see the new record added here!!

McDonald's Burgers, Fries & More	https://www.mcdonalds.com	McDonald's is an American multinational fast food corporation, founded in 1940 as a restaurant operated by Richard and Maurice McDonald, in San Bernardino, California, United States	Update Delete
Michaels Official Site	https://www.michaels.com/	Michaels Stores, Inc., more commonly known as Michaels, is a privately held chain of 1,252 American and Canadian arts and crafts stores, as of January 2021.	Update Delete
Michaels Stores Art Supplies, Crafts & Framing	https://www.michaels.com	Michaels has the products you need for home decor, framing, scrapbooking and more. Shop and save on arts and crafts supplies online or at a store near you.	Update Delete
ReactJS Tutorial	https://reactjs.org/tutorial/tutorial.html	This is a good source to learn ReactJs	Update Delete
Ross Careers	https://jobs.rossstores.com/	Job Search - Retail - Our Locations - Corporate - Retail Management	Update Delete
Ross Dress For Less	https://www.rossstores.com	Ross Dress for Less offers the best bargains on the latest trends in clothing, shoes, home decor and more! Find your store today!	Update Delete
Sam's Club Wholesale Prices on Top Brands	https://www.samsclub.com	Sam's West, Inc. is an American chain of membership-only retail warehouse clubs owned and operated by Walmart Inc.	Update Delete

Test Case - Delete Record

- Functionality Description: When user click on the Delete button on the row for a specific record on the View URLs page, it should open a modal to let user confirm if he/she wants to delete the record or not.
- User Input: Click on the Delete button on the row for a specific record on the View URLs page
- Expected output: Open the Delete confirmation modal with 2 buttons: Yes and No
- Actual output: Open the Delete confirmation modal with 2 buttons: Yes and No
- Test result: Passed

Test Case - Delete Record

McDonald's Burgers, Fries & More	https://www.mcdonalds.com	McDonald's is an American multinational fast food corporation, founded in 1940 as a restaurant operated by Richard and Maurice McDonald, in San Bernardino, California, United States	<div>Update</div> <div>Delete</div>
Michaels Official Site	https://www.michaels.com/	Michaels Stores, Inc., more commonly known as Michaels, is a privately held chain of 1,252 American and Canadian arts and crafts stores, as of January 2021.	<div>Update</div> <div>Delete</div>
Michaels Stores Art Supplies, Crafts & Framing	https://www.michaels.com	Michaels has the products you need for home decor, framing, scrapbooking and more. Shop and save on arts and crafts supplies online or at a store near you.	<div>Update</div> <div>Delete</div>
ReactJS Tutorial	https://reactjs.org/tutorial/tutorial.html	This is a good source to learn ReactJs	<div>Update</div> <div>Delete</div>
Ross Careers	https://jobs.rossstores.com/	Job Search - Retail - Our Locations - Corporate - Retail Management	<div>Update</div> <div>Delete</div>
Ross Dress For Less	https://www.rossstores.com	Ross Dress for Less offers the best bargains on the latest trends in clothing, shoes, home decor and more! Find your store today!	<div>Update</div> <div>Delete</div>
Sam's Club Wholesale	https://www.samsclub.com	Sam's West, Inc. is an American chain of membership-only retail warehouse clubs owned and	<div>Update</div>

Delete ReactJS Tutorial

Are you sure to delete this record?

Yes

No

Test Case - Update Record

- Functionality Description: When user clicks the Update button on the row for a specific record on the View URLs page, it should open a modal and allow user to update description only.
- User Input:
 - Click on the Update button on the row for a specific record on the View URLs page
 - Enter new description to update with
- Expected output:
 - Open the Update Record modal with 3 input fields
 - Title and url fields should not be allowed to edit
 - New description entered properly
- Actual output:
 - Open the Update Record modal with 3 input fields
 - Title and url fields should not be allowed to edit
 - New description entered properly
- Test result: Passed

Test Case - Update Record

Back to Search

Add New Record

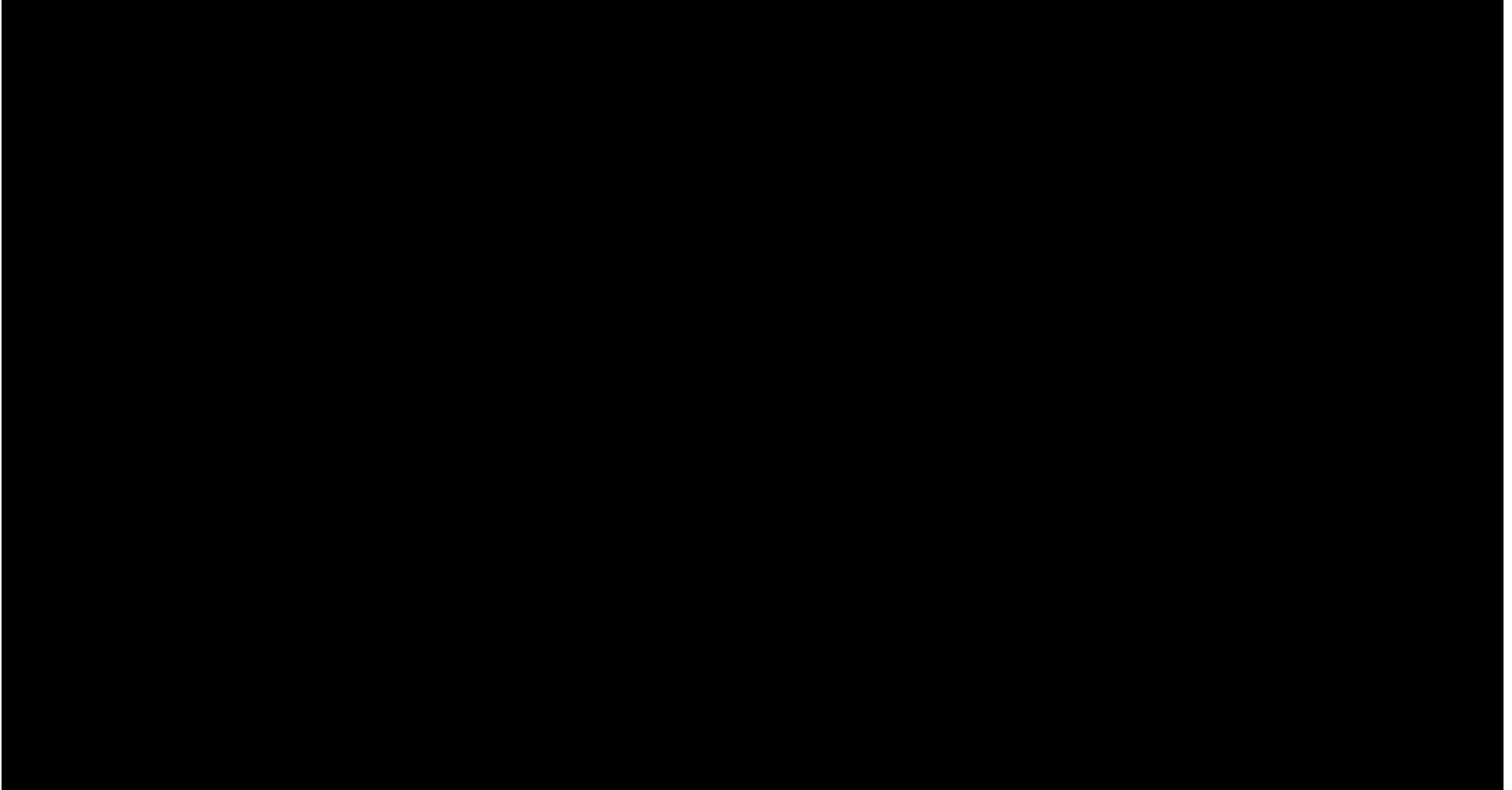
Title	URL	Description	Action
Adobe Creative, marketing and document management	https://www.adobe.com	<div><div>Update Record</div><div>Title: Adobe Creative, marketing and dc</div><div>Url: https://www.adobe.com</div><div>Description: Adobe is changing the world through digital experiences. We help our customers create,</div><div><div>Update</div><div>Close</div></div></div>	<div>Update</div> <div>Delete</div>
Adobe Developer	https://www.adobe.io		<div>Update</div> <div>Delete</div>
Amazon jobs	https://www.amazon.jobs		<div>Update</div> <div>Delete</div>
Amazon Spend less Smile more	https://www.amazon.com		<div>Update</div> <div>Delete</div>
American Honda Motor Co Inc. - Official Site	https://www.honda.com		<div>Update</div> <div>Delete</div>
Bank of America - Banking, Credit Cards,	https://www.bankofamerica.com		<div>Update</div>

Integration

All the apis integrated:

- <http://localhost:5000/searchWord>
- <http://localhost:5000/autoComplete>
- <http://localhost:5000/binarySearch>
- <http://localhost:5000/createRecord>
- <http://localhost:5000/updateRecord>
- <http://localhost:5000/deleteRecord>

Demo



Thank You

Any Questions ?