iNeuron

Low Level Design

Advanced Image Downloader

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Document Control

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Reviews:

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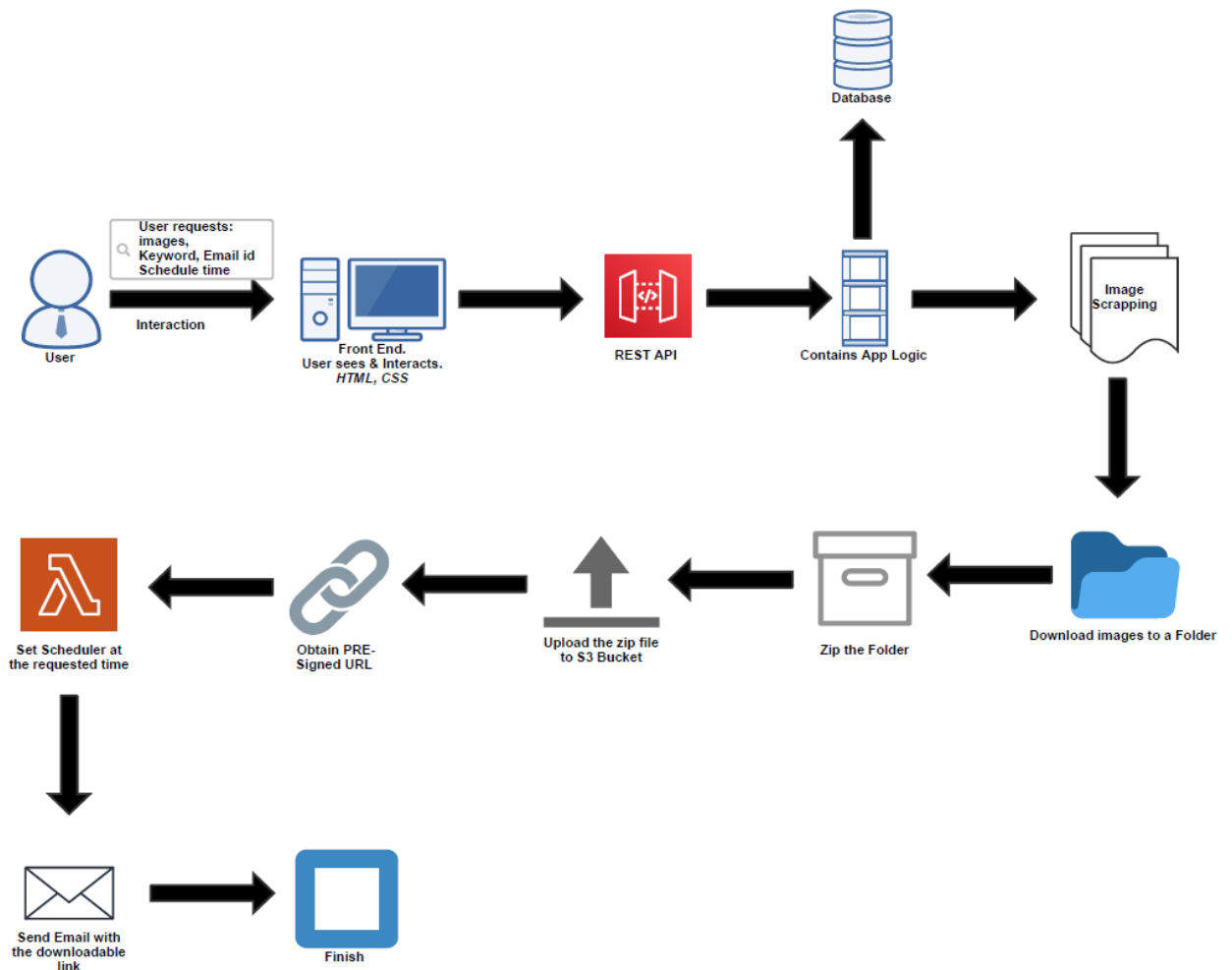| Version	Review Date	Reviewed By	Approved By	Comments

Contents

1. Introduction

1.1. What is Low-Level design document?

The goal of LLD or a low-level design document (LLDD) is to give the internal logical design of the actual program code for Food Recommendation System. LLD describes the class diagrams with the methods and relations between classes and program specs. It describes the modules so that the programmer can directly code the program from the document.

1.2. Scope

Low-level design (LLD) is a component-level design process that follows a step-by-step refinement process. This process can be used for designing data structures, required software architecture, source code and ultimately, performance algorithms. Overall, the data organization may be defined during requirement analysis and then refined during data design work

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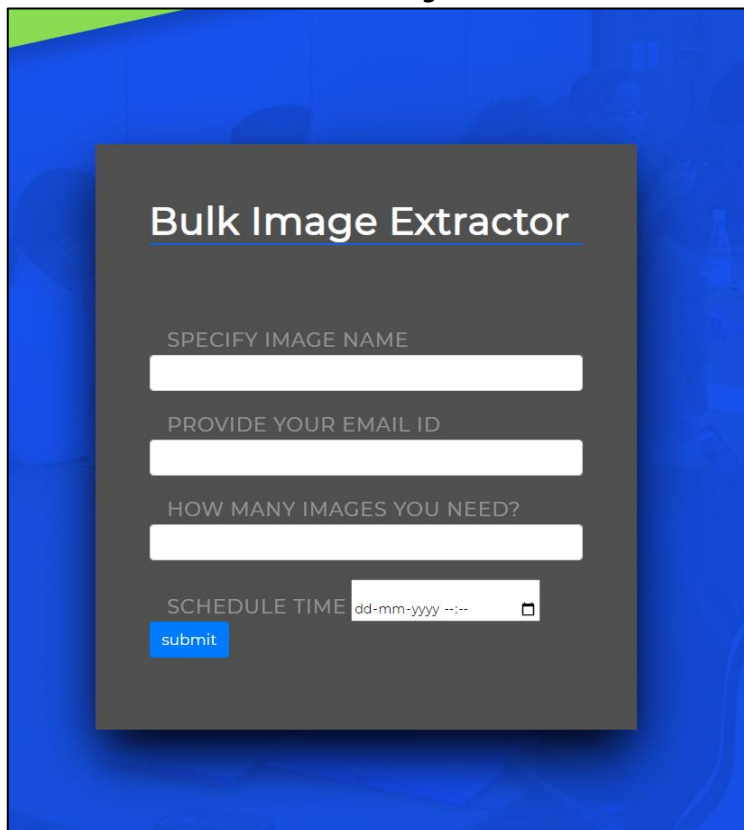## 2. Architecture

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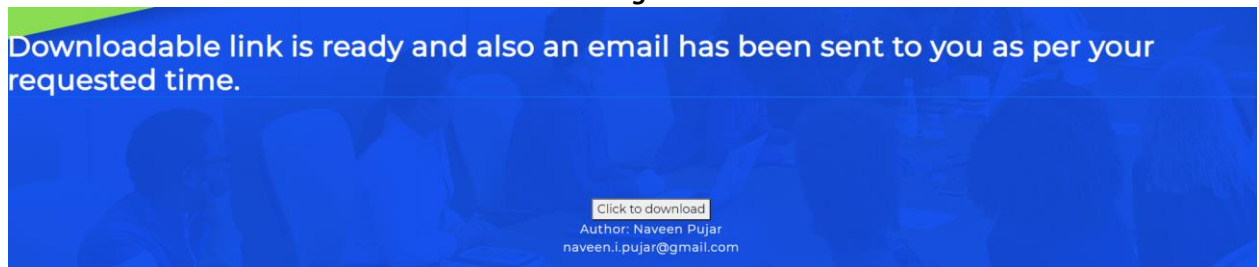
3. Architecture Description

3.1. User request through Front end

The requestor has to provide a desired input such as the kind of images which he/she is interested in downloading, scheduled time, email id and the number of images which he/she wants to download. To enable this user interface is developed using HTML and CSS.

Home Page

Results Page

3.2. Web scraping

Once the search keyword has been submitted at the front-end, selenium web driver will launch a browser and starts downloading images and would store them in a folder. This folder will be later zipped for further uploading to a storage service.

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3.3. Upload the Zipped Folder to S3 Bucket and Obtain URL link

The zipped folder containing images would be uploaded to the S3 bucket. S3 Bucket provides feasibility to fetch PRE-Signed URL of an object available in the bucket. This URL can be passed on to the requestor to download the file in their respective local system.

3.4. AWS Lambda & Email

The front end part of this projects requests user to specify the time at which they would want to get the URL for downloading the images. AWS Lambda service has been included within the code for sending emails at the particular instance of time.

3.5. Database

Cassandra database will be used to store the entries made by the user at the front end and logging details.

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4. Unit Test Cases

Test Case Description	Pre-Requisite	Expected Result
Verify whether the Application URL is accessible to the user	1. Application URL should be defined	Application URL should be accessible to the user
Verify whether the Application loads completely for the user when the URL is accessed	1. Application URL is accessible 2. Application is deployed	The Application should load completely for the user when the URL is accessed
Verify whether the User is able to sign up in the application	1. Application is accessible	The User should be able to sign up in the application
Verify whether user is able to access the application	1. Application is accessible	User should be able to successfully access the application
Verify whether user is able to see input fields on searching	1. Application is accessible	User should be able to see input fields while searching
Verify whether user is able to edit all input fields	1. Application is accessible	User should be able to edit all input fields
Verify whether user gets Submit button to submit the inputs	1. Application is accessible	User should get Submit button to submit the inputs
Verify whether user is presented with recommended results on clicking submit	1. Application is accessible	User should be presented with recommended results on clicking submit
Verify whether the recommended results are in accordance to the selections user made	1. Application is accessible	The recommended results should be in accordance to the selections user made

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