

Project Design Phase-I Solution Architecture

Date	19 September 2022
Team ID	PNT2022TMID06749
Project Name	Project – News Tracker Application
Maximum Marks	4 Marks

Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

- Find the best tech solution to solve existing business problems.
- Describe the structure, characteristics, behaviour-, and other aspects of the software to project stakeholders.
- Define features, development phases, and solution requirements.
- Provide specifications according to which the solution is defined, managed, and delivered.

Solution Architecture Diagram:

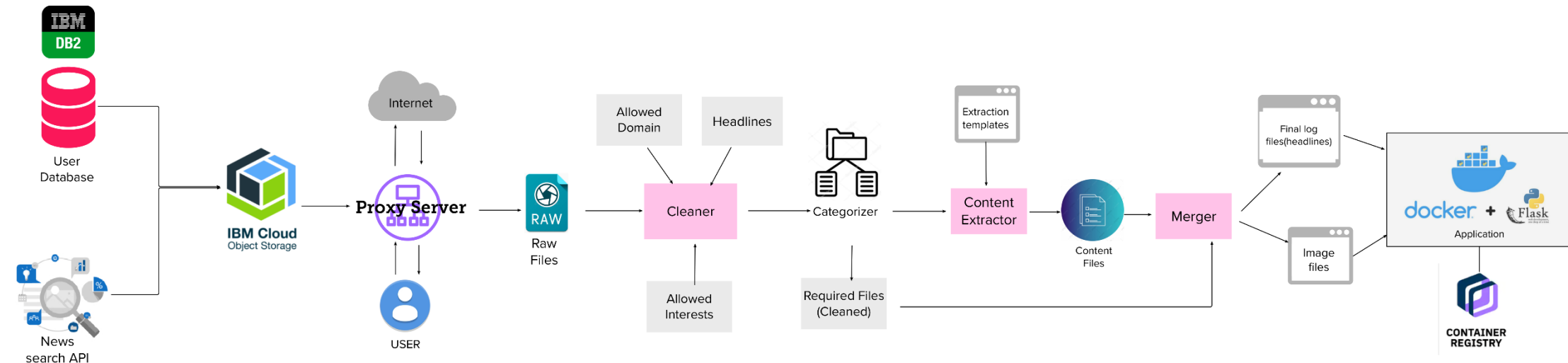


Figure 1: Architecture and data flow of the News tracker Application

News is one of the primary sources of gaining information about the actions and events that happen all around. It may be an event that happened in the past, happening now or going to happen in the future. In the present days where there is a rapid increase in the development and adaptability of technologies throughout all the demographic of people, it is necessary to provide news in such a way that it is interconnected with the current technological trends.

Most of the people rarely read the news until something really significant occurs in their area of interest or around the world. It is possible to get the information one need through traditional newspapers and news sources, but it takes a lot of time and is not practical everywhere. Users of the **News Tracker Application** may quickly scan news stories that are tailored to their interests.

By giving a quick summary of significant events, successfully following news across several domains, and keeping up with important events in their area of interest, the application will help individuals save time.

As world's technology is rapidly growing, we have fast connection and network to instantly connect to another person. Day to day use in mobile, tablets and laptop is increasing, most of the people already have these facilities. In this fast and information-oriented world we need to stay updated with every incident and news too.

Characteristics and behaviours

- It will be simple for us to scale the application to a bigger set of users because it requires the same set of input from all users and does not carry out a lot of complicated computations.
- As users can add their own interests as well, networks get more complicated, and suggestions get better.
- Users can make friends, and suggestions can be adjusted as a result. Users are asked about their preferences when creating an account, and users are given the option to rate the relevancy of articles in order to enhance suggestions.

Project Business Model

All users will be able to use the app for free. However, because the user's interests are known, this information may be utilized to create customized adverts, which can generate a substantial amount of revenue from the advertisers. Users must purchase a membership if they want to avoid adverts and gain access to more premium news sources.

The audience may access their preferred news stories faster and in a more user-friendly setting with the help of these applications.

The application supports the user the ability to save particularly pertinent and significant news in repositories for easy access, propose hot and fashionable news based on other people's interests/likes, and news based on recently saved articles.

Specifications of solution

The APIs are doing great work on this application. They gather the news from all the mentioned websites. Later all data are going under the cleaner phase. Here these unorganized data are organized by the methods

- Validating (The Originality of news checked over all data)
- Filtering (eliminating duplicates)
- Categorizing (using keywords e.g.: - sports, science)

This organized news will be stored in the IBM cloud. In this populous world every second is a news, so the above process will be continuously working on certain time period to fetch fresh news.

When the user/customer log-in into application, they have to give their priority.

These priorities will be also stored in cloud with that user's info.

These priorities are the core to portrait only preferred news as per the user to avoid user inconvenience and have an improved interaction towards this application.

The user can also gather other preferred news by exploring over the search bar in the application. The user's request will be sent to the database then response (The user's searched news) will be published on the page.