

News App Case Study

1	Name of the Project	News App
2	Objective/ Vision	<p>Build a system to search for news article, open the article, add article, refer article and refer most liked/favorite articles to user.</p> <p>The application needs to fetch news article data by registering with the following API link and get API Key required to call the API. https://newsapi.org/</p> <p>Example API: https://newsapi.org/v2/everything?q=bitcoin&from=2019-01-06&sortBy=publishedAt&apiKey=b170738ea8d145159da715566679a48fea</p>
3	Users of the System	All Internet users
4	Functional Requirements	<p>1)UI (User interface) - should be able to</p> <ol style="list-style-type: none"> List common News articles View or open an article from the list Search for a news article Add an article into favorite list View favorite articles View recommended articles UI should be responsive which can run smoothly on various devices UI should be appealing and user friendly. <p>2)User Service - should be able to manage user accounts</p> <p>3) Refer Service - should be able to store all the referred articles for a specific user</p>
5	Non-functional requirements	<ol style="list-style-type: none"> App should be accessible from any location with access to the Internet. App should be responsive to display consistently across multiple device screens. App should have an intuitive UI that can be operated by novice-expert Internet users
6	Tools and Technologies to be used	<ol style="list-style-type: none"> VCS : Gitlab Middleware : Spring Boot Front end : Angular/React Data Store : MongoDB / MySQL Testing : JUnit, Mocha, Chai, Jest, Protractor Container : Docker Bug Fix : Sonarlint CI : Gitlab

User Stories

1	As a user I should be able to register with the application so that I can login and use the functionalities of the application.
2	As a user, I should be able to login with my user name and password in order to access the functionalities of the application.
3	As a user, I should be able to login with my Gmail account in order to access the functionalities of the application. .(Optional requirement)
4	As a user I should be able to search resources to view their details
5	As a user, I should be able to save resources to a wishlist/favourite so that I can access them later
6	As a user, I should be able to access items saved to my wishlist/favourite

Notes:

- The application should be based on microservices architecture
- API Gateway pattern should be implemented using Spring Cloud Gateway
- Services should register themselves with Eureka Service Discovery server.
- All layers of microservices should be covered with automated unit and integration tests
- All microservice endpoints should have API documentation

