News Feed Report

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Introduction

 The News Feed Web Application aims to provide users with a platform that not only shows top news from all around the world but also supports the news search function for any specific topic. The NewsAPI is the data source for the platform which provides real-time news data. Users are required to sign in via a Google account which ensures the account security. They can save liked news to their account and check later.

Background

The platform is a combination of a search engine and a portfolio. Normally when
users search for news in Google, they need to open a third-party application and
save the link to it which is not straightforward. Within the News Feed platform, users
can log in first via Google, and then browse news on their own choices. Finally, they
can save liked news to their portfolio.

Specifications and Design

- There are four pages:
 - Sign In page: Users can sign in via Google accounts and either find news by searching specific keywords or just scan through picked news articles set by the developers.
 - Main articles page: When users can through picked news articles, they can
 use the dropdown menu to select which category of news they want to see
 and from which region.
 - Search articles page: Users can search for news using the search bar, then
 the users will be redirected and search results will be displayed on the search
 articles page instead.
 - Liked news page: Users can use the heart button to 'like' articles that will be saved for them in the database. They can see them on the Liked News page. They can unlike them at any time.

Implementation and Execution

- The tech stack includes:
 - o Front end: ReactJS, Material UI
 - o Back end: Javascript
 - Data Storage: Firebase
 - Testing: React testing library, Jest.
- Development approach:
 - As a team of two, we chose the Agile Methodology. Each of us is responsible
 for certain end-to-end features. We take an iterative approach for all features.
 For example, we had an open discussion about how to design the search
 function and lay out the requirements. One of us wrote the code and tested
 the feature before merging it into the main branch. The function will be
 reviewed by the other member and feedback will be given.
- Implementation challenges:
 - The team only has two members, therefore, the workload including plan, design, and coding is very big for both of us. However, the communication

between us is clear and effective which leads to a smooth working process and high completeness of the project.

Testing and Evaluation

- Tests were meant to be designed for all components, including fetching the data from the News API. Unfortunately, due to time restrictions and a small group, we only have implemented one test. It worked until we added authorisation, and now it fails, but we wanted to keep it to show our efforts.
- User testing is also implemented by walking through the whole web app and following the user flow.

Conclusion

 The News Feed Web App is a great platform to show users picked top news articles, search articles and provide the news portfolio function which saves users time from storing news to a third-party application. With the React.js framework and secure firebase database, we have shown the stability and security of the web app. The UI design is clean and shows the clear functionality of each section so users can easily navigate.