

A decorative graphic on the left side of the slide consisting of two overlapping parallelograms. The front one is blue and the back one is light green. Both are tilted at an angle.

NEWS APP

A News Feed Android
Application that uses Reinforced
Machine Learning algorithm.

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ABSTRACT

This app fetches news headlines from [NEWS API](#). When a user clicks on any of the headline, the detailed content of that news headline gets opened in a Web View.

The highlight is, the app uses [Reinforcement Learning](#) to decide the preferences of showing headlines to a user based on his/her previous clicks.



MOTIVATION

News influences our decision, way of thinking, shapes our opinion and what not. Thus, selection of news becomes critical. It won't be an exxageration if we think of consuming news as an investment that we make on us. Hence, for maximizing the utility of news, it becomes important for consumers to line their priorities and interests with the news they are going to read. That's what this app strives for. The technology of reinforced learning allows users to select news of their priorities and interests.



TECHNOLOGY STACK

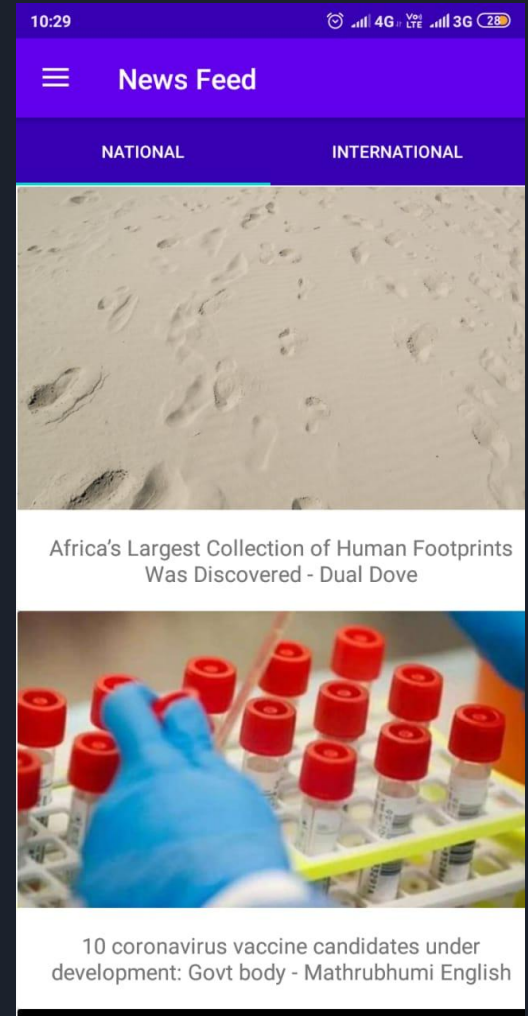
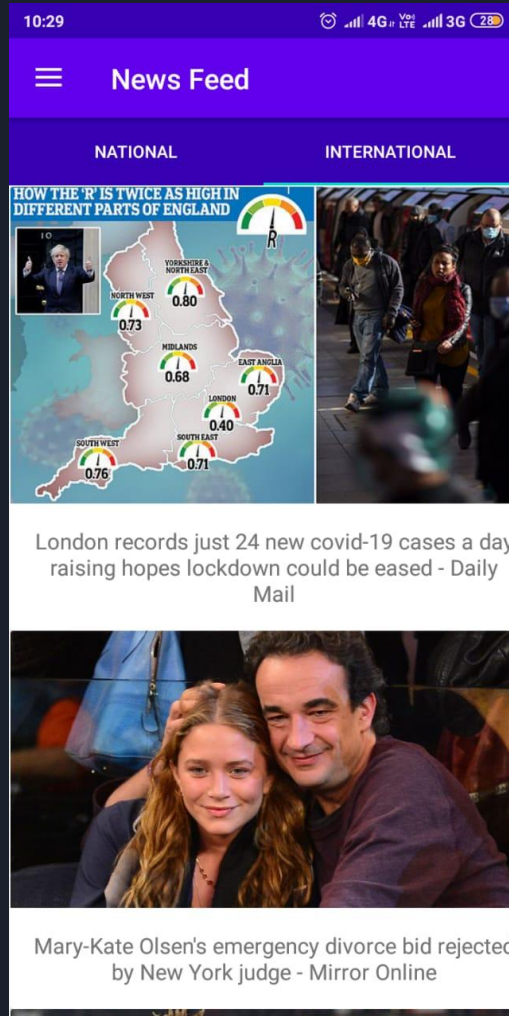
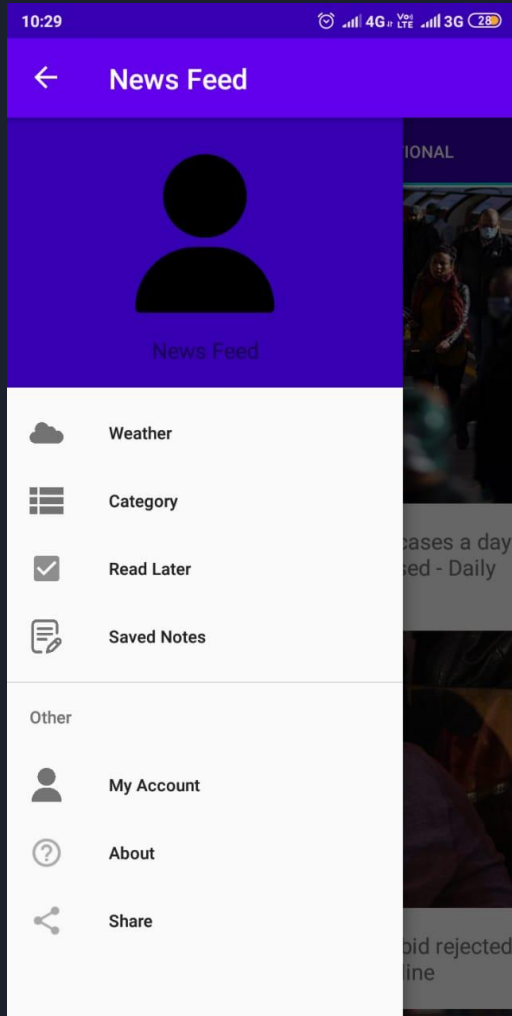
- Android Studio
- Java
- XML
- Reinforcement Learning
- APIs, Libraries, Packages



BASIC FUNCTIONS

- Two main categories of news: National & International
- News of various sub categories like business, technology, sports, science, entertainment etc. of different countries.
- Read Later Section
- Weather Update
- Add Notes Section

Main Screen of App





How the App works!!

The App fetches news data via a simple API request from [NEWS API](#) with [VOLLEY](#) (Volley is an HTTP Library that makes the networking for android apps easier and most importantly faster). After clicking on any news headline, one gets to read its detailed content.

Moreover, We have used Reinforcement technique to train the app for suggesting headlines on the basis of one's previous clicks.

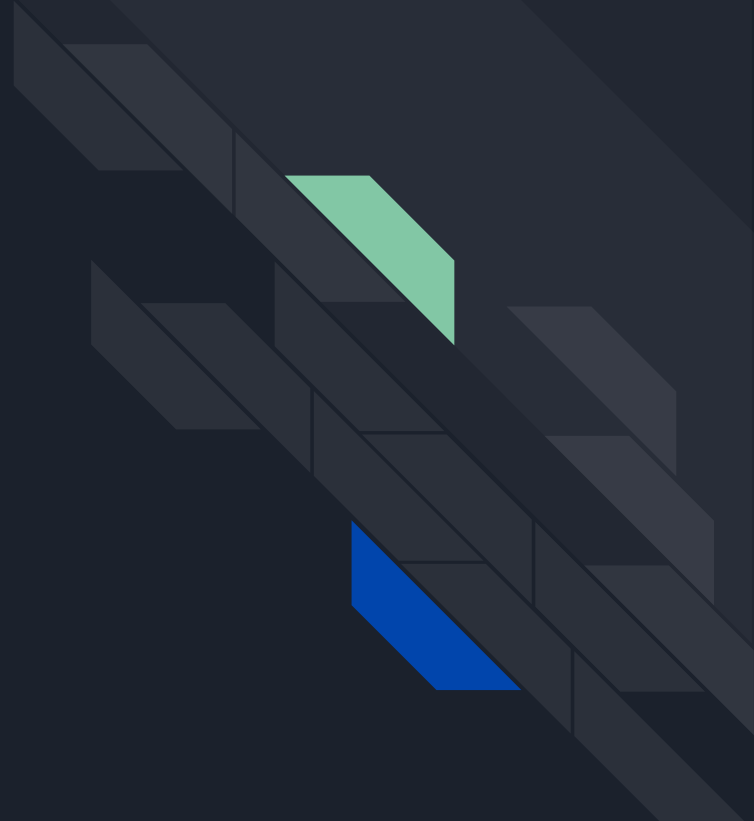


REINFORCEMENT LEARNING

Reinforcement Learning is an area of machine learning concerned with how software agents ought to take actions in an environment in order to maximize the notion of cumulative reward.

We have used Upper Confidence Bound Algorithm in Reinforcement learning to train our app.

We are now going to
present important
sections of the app in
upcoming slides...



WEATHER

This app fetches Weather data using [WEATHER API](#).

Users get to know the weather updates of any City after writing City's name in the EditText button.



READ LATER

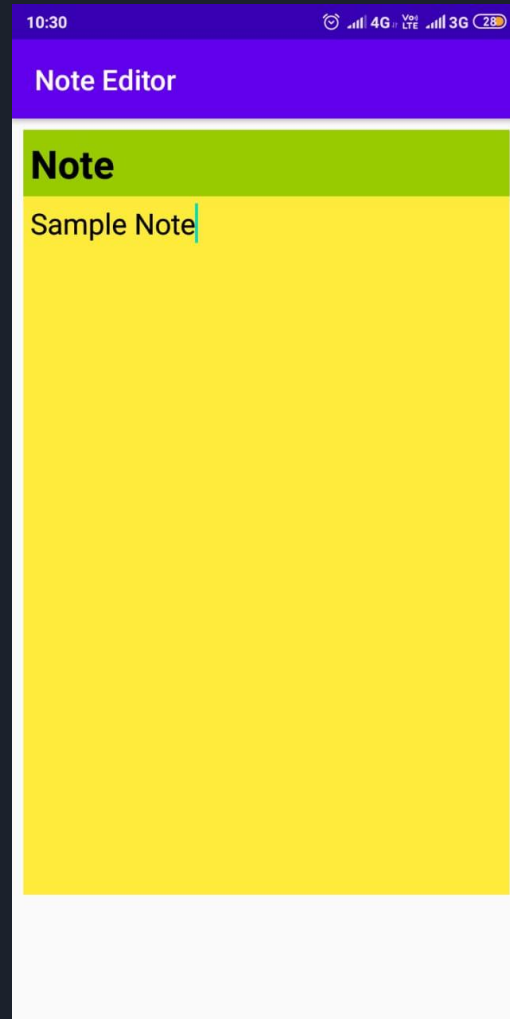
Users can save news in
“Read Later” section.



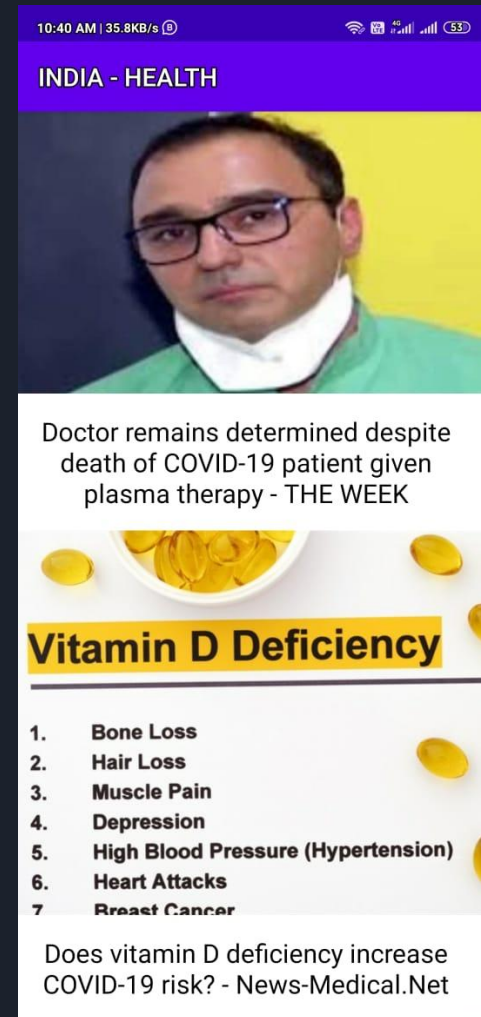
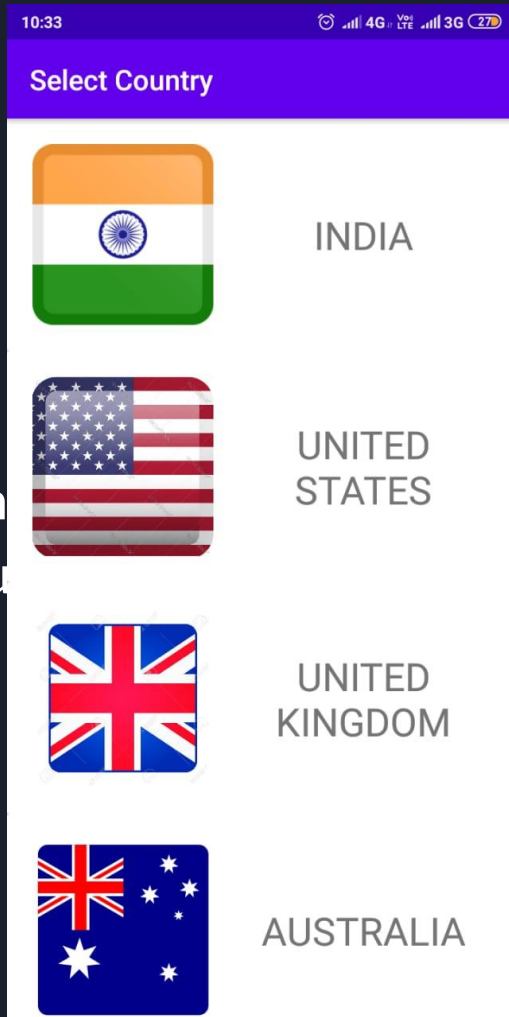


ADD NOTES

Users can make notes for future reference.



News of
different
countries and
different su
Categories.





FURTHER WORK

Presently, we didn't feel the need of authenticating a user if he/she wants to read news. So, we'll be adding log-in system connected with [Firebase](#) later.



IMPORTANT LINKS

- [Github link of this project](#)
- [Cpp Implementation of Upper Confidence Bound Algorithm](#)
- [Folder containing .apk files of this app](#)

THANK YOU!!

