NEWS APP

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

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SUBMITTED BY-

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ABSTRACT

This app fetches news headlines from <u>NEWS API</u>. 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

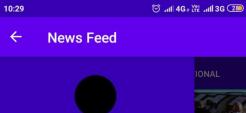
News influences our decision, way of thinking, shapes our opinion and what not. Thus, selection of news becomes critical. It won't be an exxageration if we think of consuming news as an investment that we make on us. Hence, for maximizing the utility of news, it becomes important for consumers to line 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





10:29

News Feed

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NATIONAL

HOW THE 'R' IS TWICE AS HIGH IN DIFFERENT PARTS OF ENGLAND





Mary-Kate Olsen's emergency divorce bid rejected by New York judge - Mirror Online

London records just 24 new covid-19 cases a day

raising hopes lockdown could be eased - Daily

Mail

News Feed

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INTERNATIONAL

NATIONAL INTERNATIONAL

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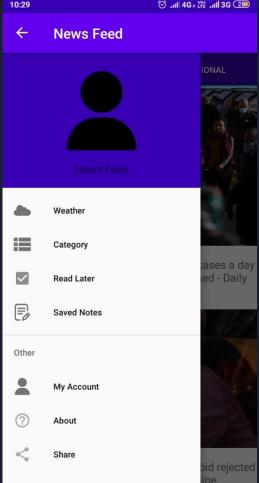


Africa's Largest Collection of Human Footprints Was Discovered - Dual Dove



10 coronavirus vaccine candidates under development: Govt body - Mathrubhumi English

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 <u>Upper Confidence Bound</u> 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 <u>WEATHER API</u>.

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.

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News of

different

countries an

different su

Categories.

Select Country



INDIA



UNITED STATES



UNITED KINGDOM



AUSTRALIA

Select Category



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TECHNOLO GY



ENTERTAIN MENT



SCIENCE



SPORTS

INDIA - HEALTH



Doctor remains determined despite death of COVID-19 patient given plasma therapy - THE WEEK



Vitamin D Deficiency

- 1. Bone Loss
- 2. Hair Loss
- Muscle Pain
 Depression
- 5. High Blood Pressure (Hypertension)
- 6. Heart Attacks
- 7 Breast Cancer

Does vitamin D deficiency increase COVID-19 risk? - News-Medical.Net

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 <u>Firebase</u> later.

IMPORTANT LINKS

- Github link of this project
- <u>Cpp Implementation of Upper Confidence Bound</u>
 <u>Algorithm</u>
- Folder containing .apk files of this app

THANK YOU!!