Department of Informatics
University of Leicester
CO7201 Individual Project

Interim Report

Advanced Computer Science

Project Title: Personalized BuzzFeed App

Student Name: Sittukala Saravanan

Student Email ID: Ssa46@student.le.ac.uk

Student ID: 199034381

Project Interim Report		
Project Supervisor	Dr. John Panneerselvam	j.panneerselvam@leicester.ac.uk
Secondary Marker	Dr. Irek Ulidowski	iu3@leicester.ac.uk
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DECLARATION

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Name: Sittukala Saravanan

Date: 29/7/2021

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1. Current Progress

Personalized Buzzfeed desktop application with responsive screen optimization has been successfully under-development with potential minimum viable working product so-far and several other features under constructive development phase. The main aim of Personalization and Visualization has been successfully carried out so-far with next step focused on Recommendation.

No.	Task	Description	Progress
ESSENTIAL REQUIREMENTS			
1	1. Collected data source and from https://newsapi.org/ which provides country-wise and category-wise data into json files.	Dataset analysis and organization is fully completed.	Completed
2	Database input from Json was done with a script on backend. Database schema and models were built in backend Entity classes.	Database design and initial test data (3 countries) implementation is successfully completed for News. Need to update data with language based on only English whereas now few data are present in other native language as well.	Completed
3	Designed Front-end panels and elements. Designed Central News feed which presents all news data for all users.	Fully implemented the structure.	Completed.
4	Developed JWT Authentication mechanism for user session and login. User can register and login with JWT tokens and session being stored in Local storage in frontend.	Fully completed but need to revisit the claims for tokens and add if any details are needed.	Completed
5	Like and Add to Favorites	Options being added for likes and favorites for each user. Facing some challenge in the reverse process of unlike.	Partially Completed.
6	Contextual Personalization – Users details like **preference** and **location** given during signup being gathered and mapped to user-category weights.	Fully completed.	Completed
7	Behavioral Personalization – Algorithm considers users likes along with context details and add on to weightage and provide user-feed based on weights and logic.	Partially Completed. Need to consider Favorites and saved feeds for ranking algorithm and add respective weight.	Partially Completed
RECOMMENDED REQUIREMENTS			
8	User Profile view, profile update and User Charts	User profile being updated with charts showing individual users-category details and option to edit profile.	Completed

9	Visualization done with amchart projection of maps and ability to select and visualize any category and country-based data	Partially implemented with few countries and need to add user-personalization to load initial user location data from map.	Partially Completed
DESIRED REQUIREMENTS			
10	Categorized feeds and saved feeds	Need to add separate category data and add option to save and delete.	Pending
11	Recommendation System – Collaborative Filtering performing user-based recommendation system.	Going through articles and journals and understanding Mahout recommendation concepts. This gathers similar interested users and suggest news category for them.	Started
12	Testing and Documentation	Need to do usability testing and framework with Test Driven Development and update testcases.	Pending

2. Updated Timeline

The timetable and tasks are carried out with maximum efforts on developing essential working product and touch-based on all sector requirements for easy take-up further to complete the project. Here are the detailed tasks and dates for further project tasks.

No.	Task	Current Status	Estimated End Week&Date
1	Need to update database with language based on English and add few other countries data.	Started	Week 6 – July 30
2	Resolve reverse process for likes and favorites and reshape algorithms ranking.	Yet to Start	Week 6 – July 31
3	Interview Preparation and Presentation	Yet to Start	Week 7
4	Implement Recommendation System	Started	Week 7 – Aug 6
5	Add option to enhance gathering user preference details by asking questions during signup and marking answers with respective weight with algorithm. (Added based on Professor's previous feedback)	Yet to Start	Week 8 – Aug 11
6	Update Visualization with locations and update JWT token claims	Yet to Start	Week 8 – Aug 13
7	Category data and Save Feed	Yet to Start	Week 9 – Aug 17
8	Final Report Template	Yet to Start	Week 9 – Aug 20
9	Testing Framework – backend. Implement TDD.	Yet to Start	Week 10 – Aug 27
10	Create User Stories and Perform Usability Testing	Yet to Start	Week 11 – Sept 3
11	Final Report Work	Yet to Start	Week 12 – Sept 10