Understanding Requirements Engineering Concepts through Design Thinking: An Experimental Study with Students

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PROBLEM SPECIFICATIONS USED IN THE STUDY

P1:

StartAPP for StartUP

Automated Crawling Tool StartUP application is an informative application which guides you how to getting started witxh a StartUP, where you can get funding or where you can get incubation. After having an idea there are many challenges ahead faced by the entrepreneurs? This application acts as a medium which provides guidelines and a set of instructions which can help budding entrepreneurs at a very early stage.

P2:

Programming: Programming Club

Programming APP is an application manages all the activities performed in the club. The functionalities like asking questions, posting reviews, forums, examples, and schedule need to be maintained in the data, and so on. Every week challenging questions need to be posted by crawling from competitive programming portals.

P3:

CPC: Code to Pseudo-code converter

For a given problem description, the pseudo-code is developed based on the steps need to be computed and then converted to the code. However, writing the pseudo-code is very difficult in comparison with the restricted natural language text and also difficult to understand. CPC is a tool which automatically converts the submitted code (in any programming language) to the standard pseudo-code format.

P4:

Food & Symptom Tracking

What a person eats has a direct impact on their health. Bowls combines food and symptom tracking with data visualization in attempt to aid users in identifying causal relationships. Users track foods they eat at their desired level of granularity and symptoms they experience separately. The Bowls app presents this data in the form of charts and dashboards, and allows the user to filter data according to their needs in order to help determine potential food sensitives.

P5:

Melon AI: a sound-recognition app for the deaf and hard-of-hearing community

Approximately 5% of the world population suffers from disabling hearing loss. We set out to create an impactful solution for this community that addresses some of their everyday needs. The application intends to use artificial intelligence to recognize key sound events of interest to this community, such as car horns and babies, where immediate alerts and continual logging are critical for the user. The application should work in real-time.

P6:

Bias Detector

With over 160 million reviews, Yelp is the go-to destination for many searching for reviews of local businesses. Yelp's 170 million monthly unique users put a lot of faith in the reviewers to give fair, unbiased, impartial reviews of businesses. However, can all reviews really be trusted? Yelp reviews are not immune to reviewers' racial, gender and socio-economic biases, impacting the average ratings of businesses and unfairly affecting their owners' livelihoods. The Bias Detectors are here to set the record straight.

P7:

Automated Itinerary Planner

ITIPlanner is an application that provides you with an itinerary for your next trip based on your interests. The application optimizes for prominence of attractions and distance travelled throughout the trip. It also allows you to easily share the itinerary among fellow travelers and access your plans offline avoiding a roaming data plan.

P8:

Personality Prediction System Through CV Analysis

This will enable a more effective way to short list submitted candidate CVs from a large number of applicants providing a consistent and fair CV ranking policy, which can be legally justified. The application will rank the CV's based on the experience and other key skills which are required for particular job profile. This application will help hiring organizations to easily shortlist the candidate based on the CV ranking policy.

P9:

DegreeAudit

DegreeAudit is a tool to automatically check if a student transcript meets graduation requirements. It comprises a domain specific language for defining graduation requirements for each department/program at a university, as well as translators to encode the degree audit question for a specific student in Boolean logic. The analysis returns reasons justifying its conclusion as to whether the student transcript meets the degree graduation requirements.