

ODD 2 EVEN – PROGRESSIVE WEB APP(PWA), AGILE METHODOLOGY & USABILITY TESTING FOR DEVELOPING AN APPLICATION FOR SHARING OFFERS AND DEALS

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Background of Proposed Research

- Usability testing, Agile methodology, Progressive Web App, and Performance testing are the important aspects of this software development.
- The drive of this research has produced a progressive web application which provides the features like push notifications, working offline and it acts like a native app.
- The application has been hosted on Firestore, which is cost effective, has instant scalability and improved data sharing and security.
- Developed application has undergone usability testing and performance testing within the agile methodology.

Literature Review

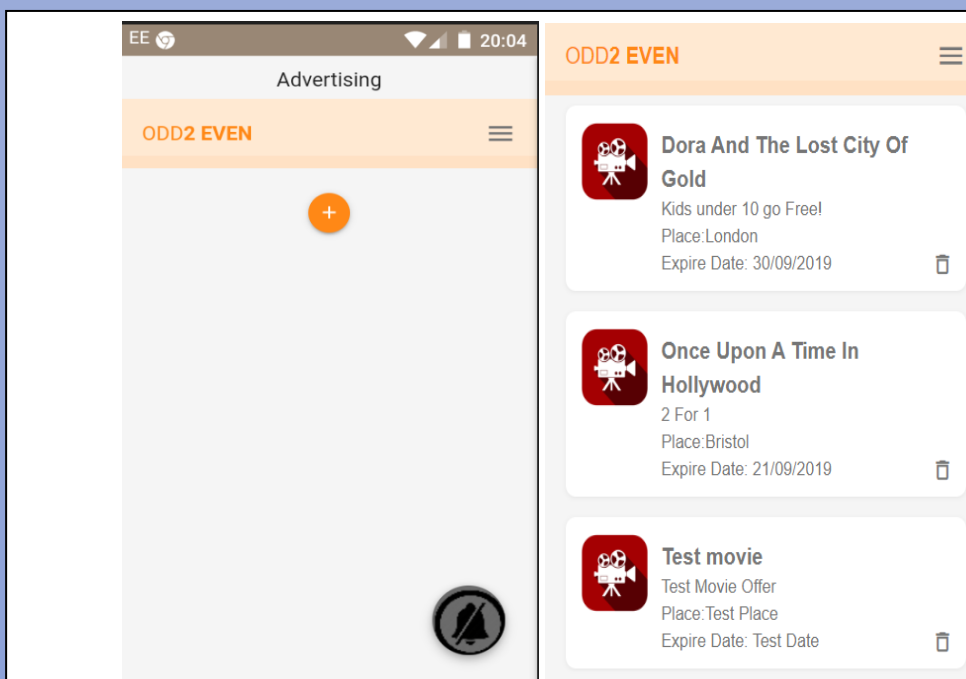
- Orange has began to offer 2for1 movie tickets on Wednesdays back in 2003 to orange customers, but does not exists any more.
- Apps related to proposed application are “Meerkat” and “2for1”.
- Apps in the market are related to one specific content but not altogether like food, travel and the movie that are present in this app.

Aim:

- To perform usability testing within Agile process in cloud environment.

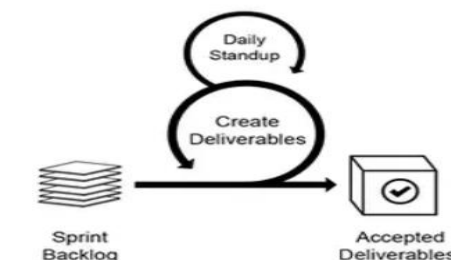
Objectives:

- To develop the O2E application
- To carry out Usability testing within Agile Methodology
- To conduct Performance testing



Screen Shots of PWA application. Mobile version.

Methodology:



- Improves process and performance as they proceed with the subsequent sprint.
- Positivism Philosophy and Inductive Approach methods were used.

Results

- Conducted survey with 15 participants.
- 60% were happy with navigation and appearance.
- Received 4-star rating overall.
- Implemented one of the suggestions in sprint.
- Based on the study, usability testing can be introduced in the agile methodology [1].
- Application was developed with the new technology called PWA, introduced by Google

References

- [1] P. Rahayu, D. I. Sensuse, W. R. Fitriani, I. Nurrohmah, R. Mauliadi and H. N. Rochman, “Applying usability testing to improving Scrum methodology in develop assistant information system,” in *IEEE*, Bandung, Indonesia, 2016.