**Expert Virtual Trainer**

**(An Intelligent Tutor Android Application)**

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**Abstract**

It will be an expert application which can be use as intelligent trainer of a subject to student. It will be more interactive which behaves like a human teacher is teaching you. Now a day, artificial intelligence combines with Computer Science produce the expert system which cans advice, perceive and take decision which is very interactive to users. Expert Virtual Trainer (EVT) is an intelligent android application to teach the people.

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1. **Problem Statement**

There are several app on google play store that provide tutorial and training for several subject but here I want to make an app with intelligence capability and at least it should have following features.

* It will start like you are going to join a classroom program which have schedule of classes, where class starts and ends on specified time.
* There will be a text as well as audio running simultaneously in lecture.
* It will be good performance observer by taking test at the end of the session and if you fail then it will observe your weak topics and will trained you again but only that weak topic until you clear the exam.
* Next day it will take your test from both today and pervious covered topics and question will be different.
* You can’t unlock the all content at once, only previous covered syllabus can be unlocked.
* It can have much more scope in the future but it can be achieve step by step.
1. **Aim**

To develop EVT App that help people to get high quality of education and its intelligence feature will make it best app on market.

1. **Motivation**

The initial idea came when I was studying Artificial Intelligence and I thought what will be the result if I combine the capability of AI and programming to make an expert Teacher. I decided to choose Android open source environment to implement these feature together and when I saw your gsoc 2016 idea on 11 march 2016 for Educational Application.

1. **My Understanding of the project**

As per my understanding it will have these units:

**User Interface:** it is all about how user interacts to learn and it contain swipe tabs, speech recognizer and other stuffs to deliver high quality education.

**Database:** to store all the materials, user history, experience, progress report and security constraints, a well organize database scheme should be used. As concerned above to provide intelligence feature it required well organize database.

**Process Unit:** it concern with how data can be accessed fast and sufficient search scheme will be apply. It contain speech recognition process handling, regular adaptive Test series maintenance, search the weak topic for student according their performance, Test etc.

**Intelligent code:** appropriate code for behaving like human. It requires using some artificial intelligence feature to deliver high quality app.

1. **What I will contribute by the end of this project?**

I would like to deliver entire feature as much possible in android application but as I discussed it is very extensive application so we can add more and more feature in future. I believe It might be possibility of difficulty but no chance impossibility.

1. **Time Schedule [How much time I plan to devote, any other plans, commitments**

**etc]**

For some duration of GSOC coding period I will have other commitments. The time

Schedule will be as follows:

● In May: Semester exams (so will be unable to work in May). This falls

Under the community bonding period and I will try to do all my work in advance to

Compensate for this.

● June- August: Most active period, with avg. 8 hour of work including

1. **Preferred means to submit progress report and suggested frequency of the same**.

● I plan to write a blog (with max frequency of per week and minimum 2 frequency of

 Per weeks) and send the synopsis of same blog post to mentors if required. The

Blog would be hosted using Github Pages.

● I can use git as a version control system. So I would be pushing the commits to a Github

Repository.

1. **Academic and Other Details**

University: GGSIP University india,Delhi

Degree: Bachelor of Technology [B. Tech]

Major: Computer Science and Engineering

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I am applying for GSOC for the first time and I haven’t work with BuildmLearn before. But

I’m highly interested in working with BuildmLearn and develop the best possible

Educational mobile application.

1. **Past Experience**

 **CryptoMsg Android Application July-Aug. ‘2015**

As part of B.Tech. Summer Project (4th Semester), I applied Techniques of Encoding and Decoding Base64, utf8, utf16 to encrypt and decrypt text and images. This application can be used for sending secret chat Massages and Images.

I see your idea on 11th march so I had no time to create prototype for you, I will be happy to provide any other information that you may need. I look forward to hearing from you.