ABOUT ME

Name : Deepak sharma
University : Jamia Millia Islamia , New Delhi , India
Current enrollment : Bachelors in computer engineering(2013-2017)
Short Bio : I have strong knowledge of Javascript , Html , CSS , C, C++ . I am also familiar with polymer library , phaser framework and git. Here is a link to my github profile github profile.
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CODING SKILLS

My system is dual booted with Ubuntu 14.04.4 and windows 8.1 powered with intel core i5 2.30GHz processor and 4GB RAM.

C/C++ was introduced to me back in high school since then I am coding in C/C++. I have 5 years of experience in C/C++. I am very familiar with the typical idioms. I tend to use a fairly object-oriented style, with structs representing objects and consistently named functions that operate on them. I was enrolled in CS50 online c programming course(link)that helped me tackle real world problems and grab concepts of data structures and algorithms .

I was part of the web development team for the annual cultural festival of my university . I used HTML5, CSS3 with Bootstrap framework and javascript to implement the user end of the website.

Skills required for TUX MIND MATH

1. Javascript and PHASER

   Developed a geometry game in phaser that helps kid to calculate area of various geometrical figures. Here is a link

2. HTML AND CSS

   Designed a website for annual cultural fest of my university.

TUX4KIDS AND ME

My beautiful journey to open source community began when I contributed to tux4kids 2 months ago . I really enjoyed working with phaser framework and contributing to Tux4me where I solved one issue related to integrating keyboard controls to tux mind exercise games.
Here is a link to my contribution link

TUXMINDMATH PROJECT

GOALS:

- We intend to improve the math skills, calculation speed and accuracy of kids by the ancient Indian technique of Vedic mathematics. This project will provide kids with an easy to use and intuitive tool that will make learning fun. I intend to improve

the existing UI/UX to achieve this. I also want to add a feature that allows monitoring the progress of the kid.

- Increase the reach and ease of use for users by making the app accessible via web and mobile apps across all platforms.

ACHIEVING THE GOAL:

Since mobile users are increasing rapidly so my aim would be to write code for web application that can be easily deployed on mobile platforms. So I am thinking css, polymer with its paper,core and iron elements are perfect choice for building web page as it make fast, beautiful, and interoperable web components .Game will be coded in javascript using phaser framework.

1. To make the learning more fun followings are implemented using phaser framework.
2. Physics arcade system will be used that allow us to add features to sprite like acceleration , velocity , gravity and make learning process very attractive .
3. Addition to this animation library of phaser can be used to add some animation to our game.
4. Moreover including audio to our game help us kids to understand vedic trick much better and background music which is very popular nowadays.
5. Video library can also be introduced to improve the ui of gameplay.

- The game will contain a main frame with the options that allows kids to learn vedic tricks on addition , multiplications , division , subtraction.

- The next frame will again allow the kids to choose from various vedic tricks on that particular category .

- Next step will be interactive tutorial walking the kids through the trick.

- This is where the fun begin kids can test challenge themselves. Improves their math skills , view their score card.

- To make game more fun levels are introduced like
  1. Calculate the given problem in given span of time.
  2. Answer as many question in given span of time.

- Cordova is simply a JavaScript API, which serves as a wrapper for native code and is consistent across devices.since our intention is to deploy an application to as many platforms as possible, with little or no platform-specific development, we should use the cross-platform workflow. The main tool supporting this workflow is the Cordova Comand-Line Interface (CLI), which serves as a higher level abstraction for configuring and building the application for different platforms.

- Finally the web application is hosted to azure and tux mind math games and tux4me games are wrapped into a hybrid app using Apache cordova to fit all screen sizes.

- Here are the screenshots of UI/UX of game play link

WHY ME

I am an enthusiastic learner and a passionate open source contributor. I have no university or other obligations during this period which gives me ample time to devote to the project. I feel that I can make a difference in students' lives by giving them the technique invented by my ancestors. I have an experience in the required skillset and have contributed to this org extensively in the preceding months.

TIMELINE

Before the start of the project, I can give around 25h/week but I have my semester examination from May 1 to May 23 during which my hours would be lower. During the project I am willing to devote 48h/week to the project. I also intend to continue my contributions after the project ends and be an active member for tux4kids.

April 21 to May 19 (4 Weeks , Community Bonding Period)

- Discuss the project outline and proposed implementation with the community.
- Work on a deployment strategy and setting up the development environment.
- Get to know more about the community requirements and constraints.

May 20 to June 3 (2 Weeks)

- Install polymer with bower.
- Setup visual studio with apache cordova tools.
- **Design the front end of web application.**
- **Implement series of addition vedic tricks.**

June 4 to June 19 (2 Weeks)

- **Implement series of subtraction vedic tricks.**

June 20 to june 27 (1 week)

- **Prepare code for mid term evaluation.**

July 1 to july 10 (approx 2 Weeks)

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- **Implement series of multiplication vedic tricks.**

July 11 to july 24 (2 Weeks)

- **Implement series of division vedic tricks.**

July 25 to august 7 (2 week)

- **Build a hybrid app using apache cordova to target maximum mobile platforms.**
- **Deploy application to azure.**

August 8 to august 23 (2 Weeks)

- **Test the code.**
- **Improve documentation.**
- **Be prepared for final submission.**