# Tux4kids Mobile

## **Develop Mobile applications for Tux4kids**

#### 1. Personal information of student

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Email: stuenofotso@gmail.com

**Google Play Developer Account: TUENO FOTSO STEVE JEFFREY** 

**Github account:** <u>stuenofotso</u>

**Country:** Cameroon

Town: Yaounde

**University:** National Advanced School of Engineering

Field of Study: Computer Science (Software Engineering)

**Principal spoke languages:** English and French

Google+ page: here

## 2. The proposal idea

- Summary

The main goal is to extend Tux4kids project beyond its installed desktop software form into such areas as web-based applets and educational games for mobile platforms (Android and iOS).

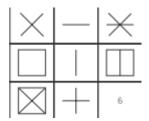
#### - Specificities

I aim to create a mobile application which extend Tux4kids project to both Android, iOS and Windows Phone. His name: **Tux Gaming Machine.** It consists of a Core or Kernel (for user interaction, management of available games or downloading of those developed apart and available online) and many packages added to it. Every Game will be a package linked to the Core. When playing with **Tux Gaming Machine**, user (child

and young people) will increase their intellect by being asked to (default packages):

 Find recurrence on series of images (cards, dominos, numbers ...).

**Example:** Here, user will select which image between many proposed could complete the series.



#### • Tower of Hanoi

It consists of three rods, and a number of disks of different sizes which can slide onto any rod. The puzzle starts with the disks in a neat stack in ascending order of size on one rod, the smallest at the top.

The objective of the puzzle is to move the entire stack to another rod, obeying the following simple rules:

- Only one disk can be moved at a time.
- Each move consists of taking the upper disk from one of the stacks and placing it on top of another stack i.e. a disk can only be moved if it is the uppermost disk on a stack.
- O No disk may be placed on top of a smaller disk.

I have already started this part of the game and source code can be found on my github account (<a href="here">here</a>).

#### Hangman

It is a guessing game for two or more players. One player thinks of a word, phrase or sentence and the other tries to guess it by suggesting letters or numbers. Here, the computer will generate the word and the user will try to guess it.

 Many other games modules which could be developed by one another, apart and added to the game as a package.

In the game, the computer will interact with the user with an interactive Tux who will talk and display messages to him.

All this will be done using HTML/CSS/Javascript/PhoneGap.

### 3. The project timeline

| Timeline             | Tasks   |
|----------------------|---|
| 27 April-25 May      | -Discussion with the mentor to get more information and             |
|                      | instructions about the project.                                     |
|                      | -conception phase of project using UML and realization of prototype |
|                      | of the application.   |
|                      | Work time: 23h00-1h30 every day                                     |
| 26 may – 30 may      | The realization of the design of interface and UI                   |
|                      | implementation.   |
| 1 June – 7 June      | School examination period   |
| 7 June – 26 June     | Coding of core main module: interaction with user                   |
|                      | Coding of core main module: launcher who will launch game module    |
|                      | selected by user if available.                                      |
|                      | Coding of core main module: downloader who will display list of     |
|                      | available games to the user and download selected one.              |
| 26 June- 3 July      | Mid-term Evaluation   |
|                      | Implementation of Recurrence finding module                         |
|                      | Implementation of Tower of Hanoi                                    |
|                      | Implementation of Hangman   |
|                      |   |
| 17 August -24 August | Scrub code, write tests, documentation                              |

### 4. About yourself

#### a. Presentation:

My name is TUENO FOTSO STEVE JEFFREY, and I'm currently pursuing computer engineering at National Advanced School of Engineering Yaounde Cameroon and I am in level 4.

I code in

Java/Python/Django/C/Html5/CSS3/JavaScript/Jquery/Php/Ruby/Prolog.

I am very passionate about gaming, particularly Logic Games and about coding. I am leader of android team of Google Student Club of my University. I learn very quickly and I like doing research, this is why I attempted and passed Google Web Academy Online Professionals. This is my first year to participate in Google Summer

of Code and I would like to improve my coding skills, to contribute to the open source project and become an example to follow.

### b. Some links of previous projects:

https://play.google.com/store/apps/details?id=com.polytech.remotecomputer

https://play.google.com/store/apps/details?id=com.polytech.hospitalmap

https://drive.google.com/file/d/0B5agoNPmSuBzMWFHcjBfNXRxRVE/view?usp=sharing

https://drive.google.com/file/d/0B5agoNPmSuBzVmhoWVY0X1J6cGM/view?usp=sharing

https://drive.google.com/file/d/0B5agoNPmSuBzMkFMbVctVlpOTGs/view?usp=sharing

#### c. Participation

During my work hours for the GSoC 2015, I would always be logged in IRC (channels: #tux4kids, #gsoc) and also can always be reached at <u>my email</u>. All source code I write will be published to <u>my Github</u> and at each stage of development I would like to discuss implementation details with the mentors.

#### 5. Q/A

- Q) Are you willing and able to work on other projects instead?

  I willing to work on other project on your ideas page
- Q) Please describe you preferred coding languages and experience

Java/Python/Django/C/Html5/CSS3/JavaScript/Jquery/Php/Ruby/Prolog

```
Java----40%
Python----40%
Django----80%
C----30%
Html5----80%
CSS3----30%
```

Javascript----60%
JQuery----70%
Php----30%
Ruby----20%
Prolog----40%

# Q) Please describe any Windows, UNIX or Mac OS X development experience relevant to your chosen project

I have developed in all listed languages in Windows and Linux (Debian 7, CentOS 6 and Khali Linux).

I have developed a mini web server using C in Debian 7.

# Q) Have you applied for (or intend to apply for) any other Google Summer of Code 2015 projects? If so, which ones?

I am focusing on only one project at this time.

#### Q) How much time do you expect to have for this project?

From now until 10 June, I will spend 3 hours by days.

My school exams will be finish at June 10.

From 10 June, I will spend all my time on this project 24/24; except time to sleep and eat.

# Q) Why are you well suited to perform this project and why are you interested in it?

I think I have the basic knowledge to perform this project and I think that working on it will increase my skills. Also I learned about open source project, I used widely open source software and I would like to contribute.