Tablet Programming Environment

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THE DEPARTMENT OF
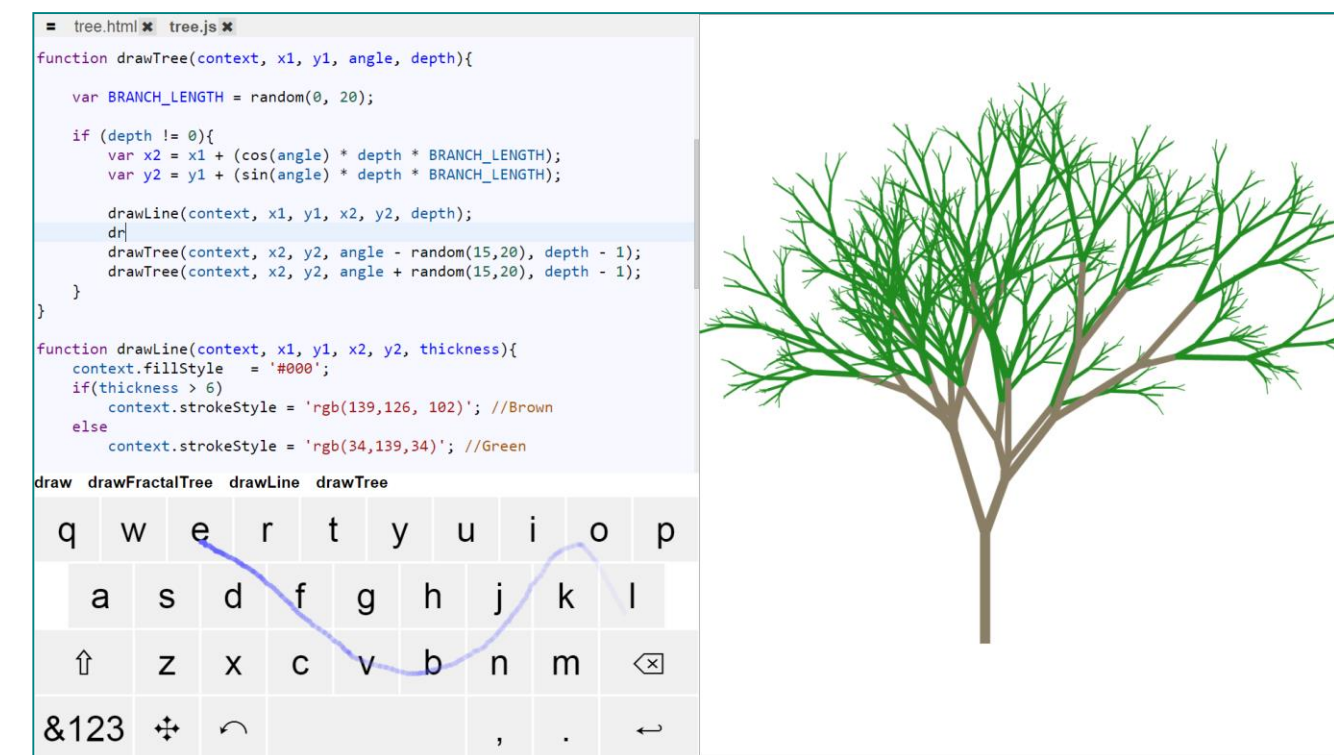**COMPUTER SCIENCE & ENGINEERING**
計算機科學及工程學系

Introduction

The goal of this project is to create a programming environment for mobile devices (tablets, smartphones) so that users benefit from the portability of mobile devices and can write code everywhere.
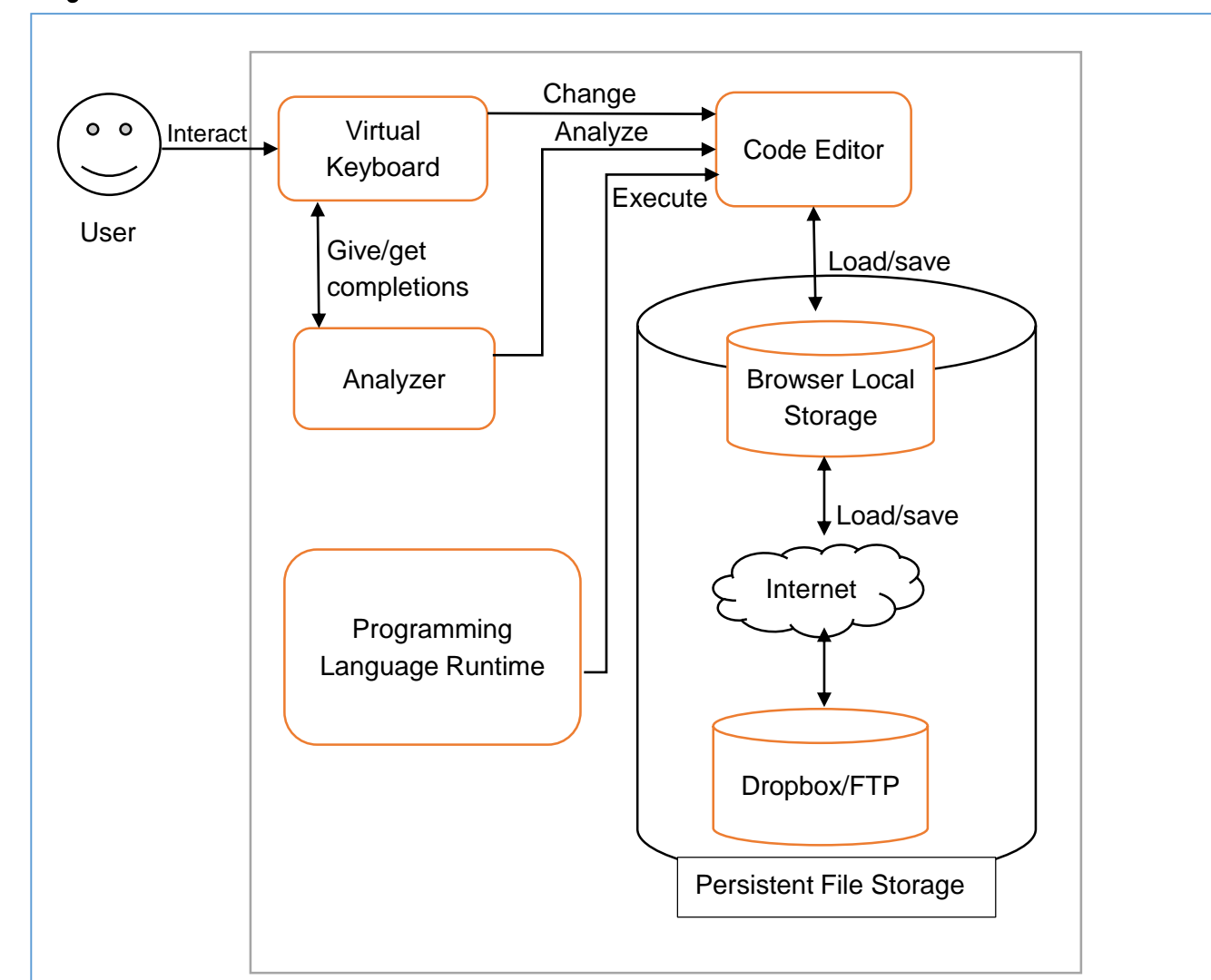
Features

1. Context-aware Virtual Keyboard
   1. Code Completion
   2. Swipe Gesture Input

2. Runs on different mobile platforms
   1. Android
   2. Windows
   3. iOS

3. Support editing and executing multiple Programming Languages
   1. HTML
   2. Javascript
   3. CSS
   4. Python
   5. Processing
   6. Easily extensible to support more…

4. Remote File Storage
   1. Dropbox
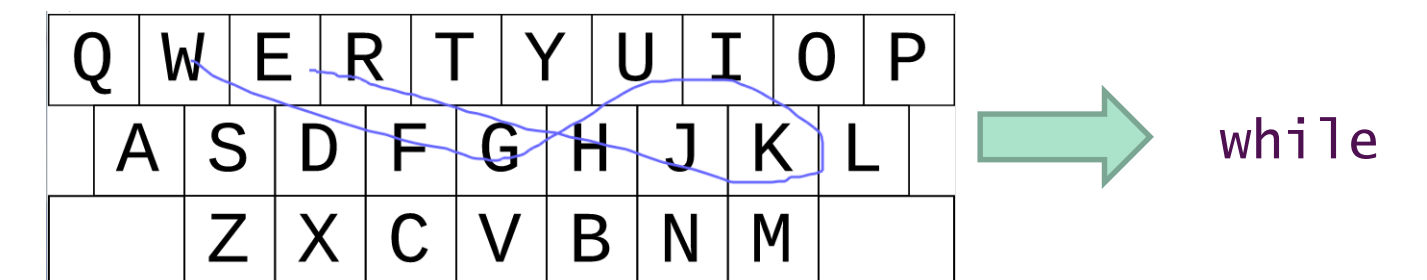   2. FTP Server

User Interface

System Overview

Implementation

Code Completion
- Static code analysis using third-party library
- Pre-defined reserved word dictionary

Swipe Gesture Input
- $1 Gesture Recognizer

Front-end
- Web app using HTML5, CSS3, Javascript
- Responsive Web Design
- CodeMirror Editor
- Javascript implementation of Python and Processing languages
- Offline accessible once cached in browser

Enjoy Coding on the go using your mobile devices!