

HKUST Green Mobile App Ver. 2.0

Lun Yiu Hung, Liang Hao Chuan, Tang Tsz Chun, Zhu Xiao Yu

Advised by

Prof. Jogesh K. MUPPALA

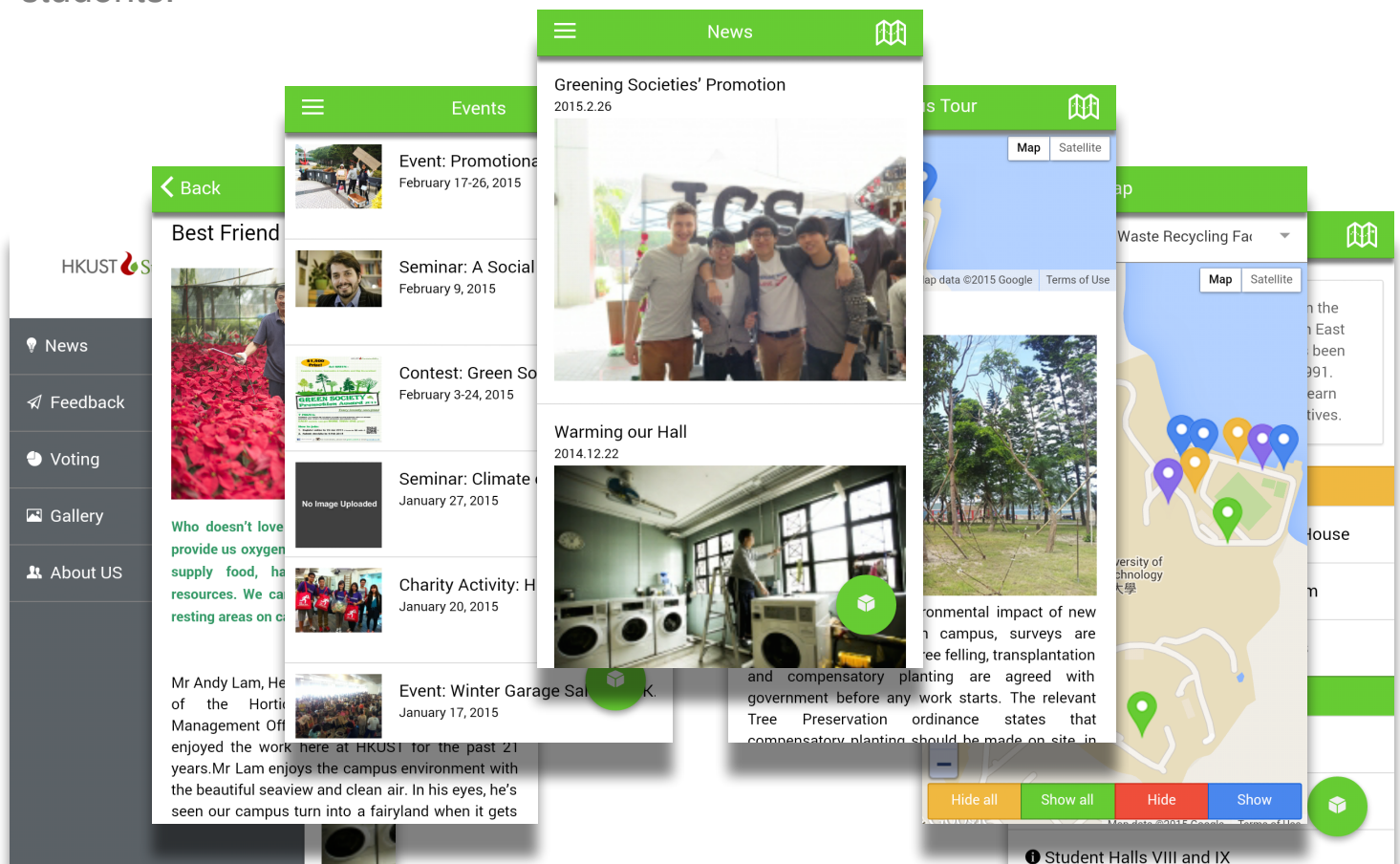
Background

The HKUST Sustainability Unit aims to educate and influence the HKUST community to develop a better understanding of issues in four areas, namely energy conservation, recycling, waste minimisation and pollution prevention.

As proceeding the success of previous version, we utilise Ionic framework and AngularJS to develop the brand new features and dedicate to make the design clean, simple and functional.

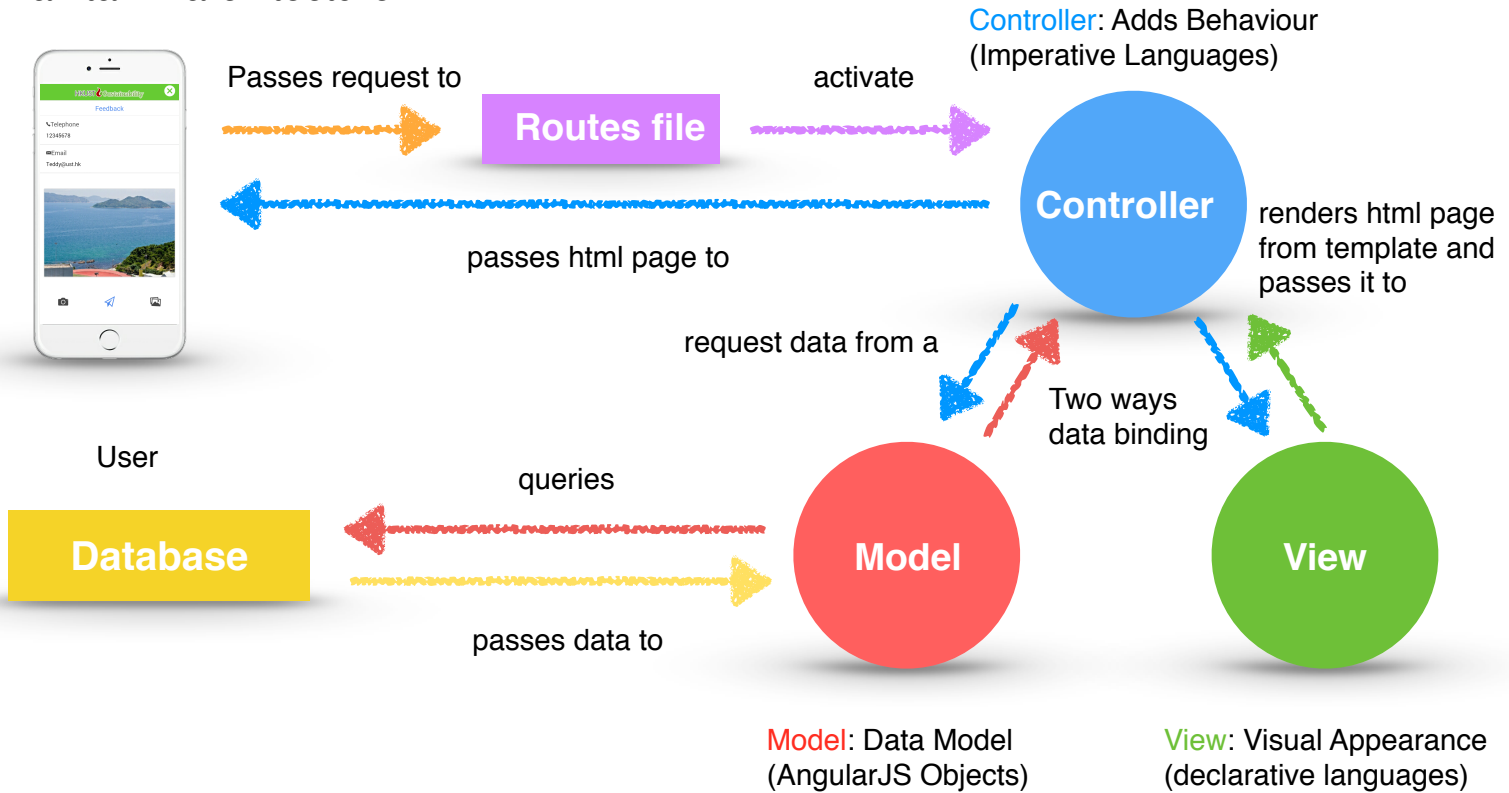
App Features Overview

Every single feature(e.g. News, Events, Video, Tips, Campus Tour, Feedback, Voting, Map) has been redesigned to deliver an exclusive experience for HKUST staffs and students.



System Software Design

To build a cross-platform mobile application with native device functionalities like camera or accelerometer, we decided to use Ionic framework on top of Apache Cordova for bridging operating system of iOS and Android. AngularJS provides the MVC architectural pattern which allows us to build a consistent and easy - to maintain - architecture.

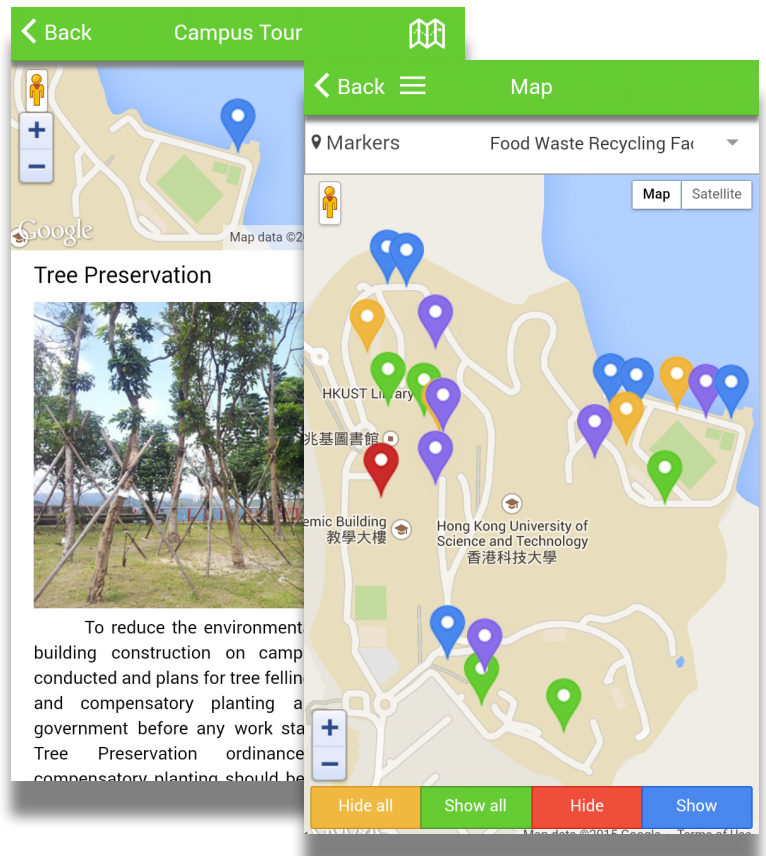


Features Highlight:

Map

To let students to find out the Green facilities in our campus, they can choose the marker which they want to see in the map and read related information with a single click on the marker's information window. We also embedded the map in **Campus Tour** to indicate related position of facility. The administrator can gain access to **SQL server administration** page for locating the **latitude** and **longitude** of markers, change the colour of markers or even the linking information page of marker.

MVC architecture pattern



Features Highlight: Material Design

Material Design is the latest visual language that created by the design team at Google. We applied this language on our app to make it more accessible, practical and usable. (e.g. Floating bubble, header bar shadow, input field animations) We believe that visual language can provide a better user experience and demonstrate the innovation and

Features Highlight: Feedback, Vote and Gallery

To let students take an active role in stamping down wastage, they can report any issue around the campus through our app. Users can get some suggestions in Feedback page, type in the relevant information or even take a picture for elaborating their ideas. Students or guests could cast their vote on discussion of green issues. In the content management system, the administrator could gather the result instantly. Tinder is the unique UX element that provides a stack of swipe cards and we love the way Tinder make it easy to process a large list of items. We applied Tinder in our app to animating the stack of gorgeous photos around our campus.

