

IS480 Project Proposal

SmartHawker iOS

HungryMen

Draft 2 – 19th May 2016

**Team Vision:**

* To take on challenges that feeds our desires to strive for the best

**Team Members:**

* Goh Gui Xiang Wendy ([wendy.goh.2014@sis.smu.edu.sg)](mailto:wendy.goh.2014@sis.smu.edu.sg)) - Project Manager & Front-End Developer
* Kay Zong Wei ([zongwei.kay.2014@sis.smu.edu.sg)](mailto:zongwei.kay.2014@sis.smu.edu.sg)) - Back-End Developer
* Cheng Chingyi ([cycheng.2014@sis.smu.edu.sg)](mailto:cycheng.2014@sis.smu.edu.sg)) - Quality Assurance and Business Analyst
* Gao Min Mell ([min.gao.2014@sis.smu.edu.sg)](mailto:min.gao.2014@sis.smu.edu.sg)) - Front-End Developer
* Chua Weilun ([weilun.chua.2014@sis.smu.edu.sg)](mailto:weilun.chua.2014@sis.smu.edu.sg)) - Back-End Developer and Back/Front End Integration

**Faculty Supervisor**:

* TBD

**Sponsor and/or Clients (if any):**

SmartHawker iOS

* Edmund Foo ([edmund@smarthawker.com)](mailto:edmund@smarthawker.com))
* Marcus Lee (marcus@smarthawker.com)
* Tan Boon Teck ([boonteck@smarthawker.com)](mailto:boonteck@kidotech.com))

**Project Overview**

* **Project Description:**

SmartHawker iOS mobile application aims to help hawkers in Singapore have access to a free and easy-to-use financial planning tool, so that they can better monitor their business finances, without having to use over-complicated software systems. Local, owner-operated single stall hawkers is the primary target group for this mobile application.

Current Issues:

Hawkers in Singapore often rely on manual or semi-manual bookkeeping methods to keep track of their financial records. This is a potential source of problems for them as the lack of accuracy and consistency associated with manual recording methods may lead to incorrect reporting of financial performance, especially when it comes to income tax reporting at the end of each financial year. Hawkers also often do not perform regular cost-benefit analyses as part of their financial decision makings. Instead, they rely on their ‘experience’ or ‘gut feel’ to make such decisions. Hawkers are also usually small sole proprietors and do not typically use POS (Point-of-Sale) systems to log their daily records and track their financials performance.

Aim and Solution:

To come up with an iOS mobile application to help hawkers improve their record keeping and business decision making, where their financial information is securely stored and easily accessible for current and future reference, e.g. income tax filing.

Main Functions:

1. Authentication
2. Password Retrieval
3. FAQ
4. Contacts for enquiries
5. Local iOS Storage
6. Parse API will be used to retrieve server storage.
7. Recording functions
8. Business Calendar
9. Information used for tax submission.
10. Analytics
11. User Access Control (for employees at multiple branches)
12. Image Capturing
13. Staff Management/Payment
14. Backend Admin Dashboard
15. Multiple Languages (English, Chinese and maybe Malay)
16. UI

* **Stakeholders**

|  |  |
| --- | --- |
| Sponsor | Edmund Foo, Marcus Lee, Tan Boon Teck |
| Users | Hawkers |

* **Deliverables**

An iOS mobile application

* **Scope**

iOS mobile application: Swift

Github (Version Control)

Parse API

Backend Parse Server

**Project Plan**

* **Project Milestones**

|  |  |  |  |
| --- | --- | --- | --- |
| Iteration | Task | Time and Venue | Involved Member |
| 0 | * First draft - FYP Proposal * Finalize survey questions * Platform to present the survey questions * Decide when should we start conducting the survey | 15th May 2016, Sunday  (SMU LABS - 0900-1400) | Whole Team |
| 0 | * Conducting of live surveys on landing page by sponsor | 21st May 2016, 4am, Saturday Early Morning,  (Old Airport Road Food Centre)  22nd May 2016, TBD,  Sunday Early Morning, (Clifford Kopitiam & nearby coffee shops)  26th May 2016, 4am, Saturday Early Morning, (Shunfu Market)  27th May 2016, 4am,  Sunday Early Morning (Tiong Bahru Market Hawker Centre) | Whole Team |
|  | Proposal | 15th June 2016 |  |
|  | Acceptance | 10th-12th, 15th -17th August 2016  (SIS SR 2.1) |  |
|  | Registration and Class | 18th August, 1900-2100  (NAKA)  *Week One* |  |
|  | Midterms | 3rd – 7th October 2016  (SIS SR 2.1)  *Week Eight* |  |
|  | Poster | 7th November 2016  *Week Thirteen* |  |
|  | Final | 21st – 30th November 2016  (SIS SR 2.1)  *Week Fifteen - Sixteen* |  |
|  | Poster Day | (Tentative) 2nd December 2016, 1130 – 1430  (SMU Concourse near MRT)  *Week Sixteen* |  |

* **Risks**

|  |  |
| --- | --- |
| Risk | Mitigation |
| 1. Possibilities of lack of user testing due to insufficient testers | 1. Early management planning and sourcing for users for testing |
| 2. Insufficient collection of data, due to testers not using the mobile application as often as possible | 2. Active monitoring and reminding for users |
| 3. New programming environment for iOS mobile application | 3. Actively learn, research and share programming knowledge with team |
| 4. Possibility of increase in scope of project | 4. Constant review of project scope and constant communication with client to manage expectations of mobile application development |

* **Resource and Reference**

1. Programming language: Swift/Objective C
2. IDE: Xcode
3. Operating System: Mac OS
4. Version Control: Github
5. Database: Swift API