**Document #2**

**Project Team 3**

**Software Engineering**

**Spring 2016**

**Due: 2/5/2016**

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Problem Statement

**Lazy Student Calendar (LSC)**

**Why automated student calendar? (Rationale)**

* No current product with this feature
* Inconveniency for user to input important dates into calendar
* Gather concise information from syllabus
* Avoid irrelevant information
* Centralized accessibility for multiple syllabi
* Easier to look up textbook
* Integration of OCR into calendar / Utilization of open-source API
* Convenience of keeping track of professor contact information

**What’s the problem?**

Students receive multiple syllabi with extraneous information, so they need a convenient way to keep relevant information in one place.

**Who is it used for?**

Mainly used for college students

**Problem statement (Functional requirements)**

**Lazy student Calendar (LSC)** is an automated method that uses student syllabus to collect important dates, contact information, and textbook ISBN (if available). **LSC** uses phone camera and OCR\* API\* in order to scan images for relevant information for the students to use. Students will be able to create an account in **LSC** that stores their username/password and holds unique account information in orderto look up book prices, contact professors, and record important dates to become more successful student.

**LSC** will allow addition and edit of dates in native mobile calendar upon image capture or at a time of students choosing. **LSC** will contact professor/TA upon image capture or at a time of students choosing. **LSC** will search for textbook prices upon image capture or at a time of students choosing. Textbook search will utilize native mobile browser. **LSC** will assume that students’ phone meet minimum SDK\* requirement.

**LSC** will store the data extracted from images in internal phone memory using a database (still deciding which database we will use). Students will be able to update **LSC** via Google Play Store.

**“Shall” statements**

* **LSC** shall automatically collect important dates, contact information, and textbook ISBN (if it’s available).
* **LSC** shall use phone camera and OCR\* API\* to scan images for relevant information.
* **LSC** shall allow user (mainly students) to create username/ password which will hold unique account information.
* **LSC** shall look up book prices based on ISBN found in the syllabus.
* **LSC** shall allow user to input dates manually through native calendar application.
* **LSC** shall allow user to look up book prices at a later time upon users’ choosing.
* **LSC** shall contact professor/ TA upon image capture or at users’ choosing time.
* **LSC** shall use native mobile browser for textbook search. (prices)
* **LSC** will assume that students’ phone meet minimum SDK\* requirement.
* **LSC** shall store the data extracted from images in internal phone memory using a database (undecided).
* **LSC** shall use “Google Play store” to update its version.

**RTM**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Entry** | **Paragraph** | **Shall** | **Type** | **UseCaseName** |
| 1 | 1 | **LSC** shall automatically collect important dates, contact information, and textbook ISBN | SW | Use case #1 |
| 2 | 1 | **LSC** shall use phone camera and OCR\* API\* to scan images for relevant information. | SW, HW | Use case #1 |
| 3 | 1 | **LSC** shall allow user (mainly students) to create username/ password which will hold unique account information. | SW, SWC | (Login system) |
| 4 | 1 | **LSC** shall look up book prices based on ISBN found in the syllabus. | SW, SWC | Use case #4 |
| 5 | 2 | **LSC** shall allow user to input dates manually through native calendar application. | SW, SWC | Use case #3 |
| 6 | 2 | **LSC** shall allow user to look up book prices at a later time upon users’ choosing. | SW | Use case #5 |
| 7 | 2 | **LSC** shall contact professor/ TA upon image capture or at users’ choosing time | SW | (Not yet determined)  “Nice to have” |
| 8 | 2 | **LSC** shall use native mobile browser for textbook search. (prices) | SW | Use case #4 |
| 9 | 2 | **LSC** will assume that students’ phone meet minimum SDK\* requirement. | SWC | (System requirement)  No use case used |
| 10 | 2 | **LSC** shall store the data extracted from images in internal phone memory using a database (undecided). | SW | Use case #1 |
| 11 | 2 | **LSC** shall use “Google Play store” to update its version | SW | (System requirement)  No use case used |

**Terminology**

* **LSC –** Lazy Student Calendar
* **OCR –** Optical Charter Recognition
* **API –** Application Program Interface
* **SDK –** Software Development Kit
* **Google Play Store –** Place for android application downloads/ updates

**WSD**

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