

# **HACETTEPE UNIVERSITY**

COMPUTER SCIENCE AND ENGINEERING DEPARTMENT

### BBM487 SOFTWARE ENGINEERING LAB Group 14

LBLS Desktop Project Vision

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Library Book Loan System Desktop	Version 1
Project Vision	08.03.2017

# LBLS Desktop

### **Project Vision**

#### 1.Introduction

Hacettepe University hosts about 40.000 students and 3.000 academic staff. So the library of the university serves approximately 45.000 people (with guests). The library has 3 different building and includes a huge archive of books sort of academical, literary, scientific etc.

So there is a requirement of a desktop application to manage borrowing process of a book, updating the archive, keeping book requests, managing the fining system, searching for books.

### 2.Positioning

#### 2.1 Problem Statement

The problem of	Managing book borrowing process and some other requirements of library that has a huge archive
affects	Student, academic staff, librarians
the impact of which is	Causes a chaos while managing this huge archive
a successfull solution would be	An efficient desktop application that connected to a database

#### 2.2 Product Position Statement

For	Librarians and customers(students, academic staff etc.)
Who	Needs to borrow a book, search for a book or needs to manage the whole archive
The	LBBS Desktop Application
That	Handles and abstracts all of technical details from users, and manages the archive effectively
Unlike	Other outmoded alternates
Our Product	Offers stylish, clean, efficient, and smart application

## 3. Stakeholder Descriptions

## 3.1 Stakeholder Summary

Name	Description	Responsibilities
User:		
Student	Student of university	Has the customer role. He/She can search for a book or borrow a book from library. Also can make a request for waiting book list.
Academic Staff	Academic personal of university	Has the customer role. Also has the same responsibilities with a student. Has not an exceptional authority or responsibility for this application.
Library Manager	The manager of library	Has the lablarian role. Manages all of the system and people. Gives brief to project developer team.
Library Staff	Staff of library	Has the lablarian role. Mostly uses the application, may give some feedbacks about system. Also has an important role for testing phase.
Developer Team:		
Project Manager	The person who responsible for time scheduling and budget planning, quality management, job sharing and supervision of the project	Arranges job sharing and appointments in all phases of project. Controls all tasks if they handled on time and correctly.  Manages budget, schedules business plan. Supports other developer stakeholders in case of need. Responsible for managing whole project workflow correctly, in time, and in budget.

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Name	Description	Responsibilities
Architect	The person who makes technical decisions about project	Defines software architecture, programming language, what kind of database will be used in back-end. Has the key role for an efficient implementation of project.
Analtyst	The person who takes over intermediary role between end-user and development team	Identifies and understands problem. Outlines requirements, details use-case scenarios, translates all of abstract contents to the technical level
Developer	The person who builds the project	Responsible for developing phase of the system. Must pay attention that if the product fits into the architecture properly. (Also takes over GUI design phase of the project for the nonce.)
Technical Writer	The person who prepares documentation	Responsible for preparing documents that will guide to development team, end-users, product owner, project manager etc. Important for clear implementation and communication.
Tester	The person who play a role in accuarcy of project	Responsible for the core activities of the test effort. Decides test cases, implements these cases and reports them to project manager and development team for instantaneous fixing.

#### 3.2 User Environment

This desktop application can be used on a desktop computer that connected to the library database. Application can be run on any operating system due to being developed on Java. Also it keep all of data on a mySQL database.

Person who want to use LBLS has to have an account that verified on database. Manipulation authority of a book or a user made by liblarian. The delegation of a lablarian will made by database administrator.

System will be implemented on Beytepe Library tentatively. According to feedbacks, other libraries and their archives will be added to database and related features will be implemented on LBLS Desktop Application.

Implementation of project will be made by a 3-person team. "Agile Software Development Model" will be implemented.

#### 4. Product Overview

### 4.1 Needs and Features (Functional)

Need	Priority	Features	Planned Release
Connecting a user to system	1	Login & Logout Feature	3rd Week
Searching for books	1	Search book feature	3rd Week
Adding a new book to system or editing	1	Manipulate Book Feature	4th Week
Adding a new user to the system or editing	1	Manipulate User Feature	4th Week
Borrowing a book	1	Self check-out feature	5th Week
Giving back a book	1	Self return feature	5th Week
Add name to book waiting list	2	Waiting list feature	6th Week

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View books that has been borrowed	2	View my books feature	6th Week
Issue late fine or pay fine	1	Fine managing feature	7th Week
Notify of book being available	2	Notify feature	7th Week

First three weeks planned for outline requirements, making pre-documentation, technical decisions etc.

## 4.2 Other Product Requirements/Features (Nonfunctionals)

Requirement	Decided Solution
Working environment of system	Windows, Linux, MacOS
Programming language of system	Java
Database management of book archive	MySQL
Graphical user interface that will designed for system	Java Swing & Adobe Photohop CC
Reporting process of entire development	Microsoft Office & Google Documents