

WyoExchange

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Project Introduction

- WyoExchange is a peer-to-peer textbook exchange platform built for Android and Web.
- It provides an alternative means for students to obtain textbooks without paying high prices and helps to foster a more supportive and cooperative environment.

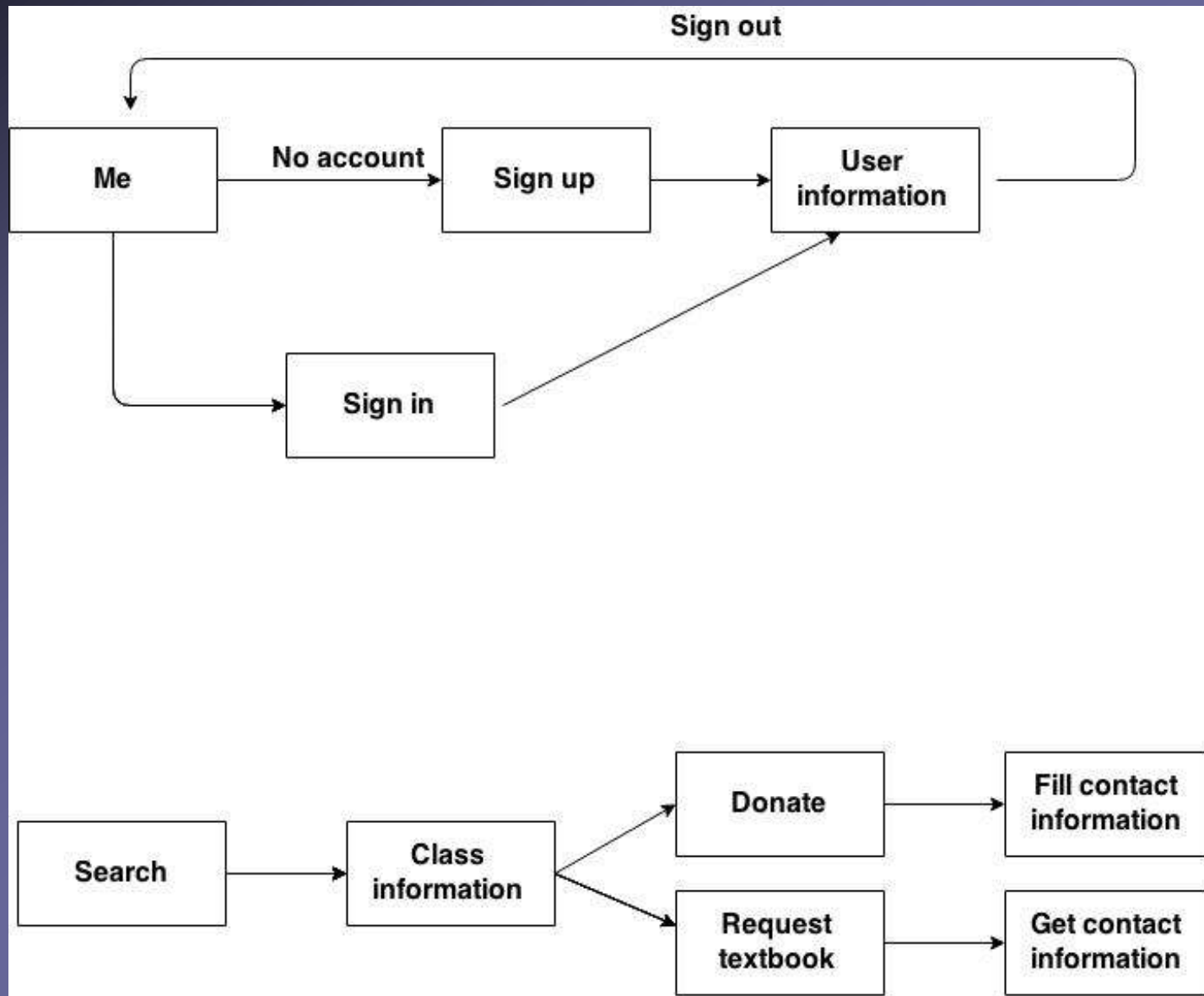
Project Motivation

- Created to help students
 - Textbooks are expensive
 - According to the College Board students spend on average \$1,200 every year on textbooks and a single book can cost as much as \$200
 - These costs cannot be completely avoided, but by donations they can be reduced

Functions

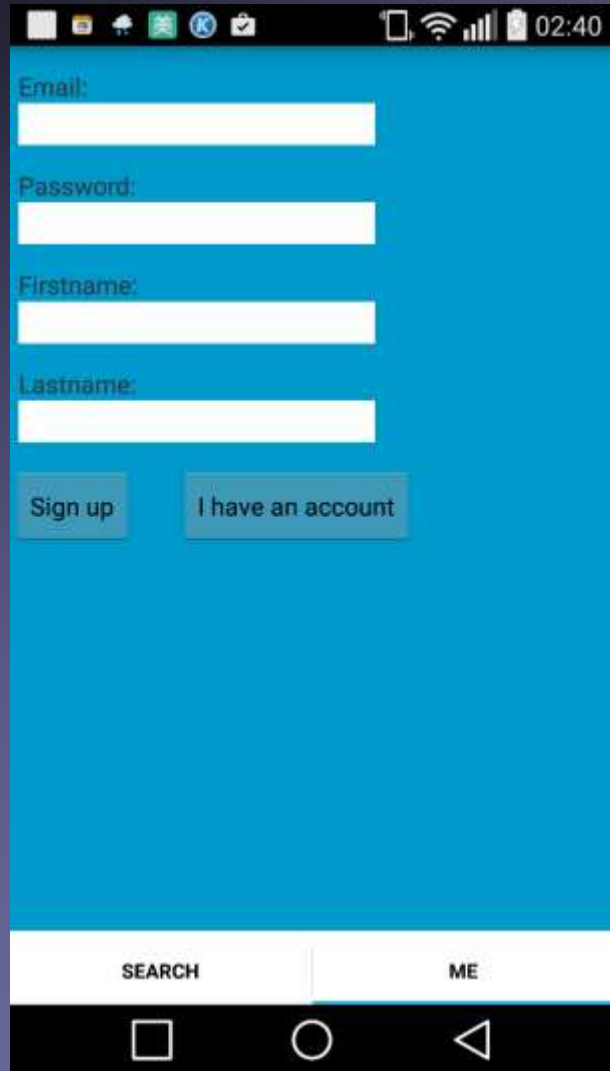
- Sign up & Sign in
- View credit balance
- Search by class
- Donate textbook
- Request textbook

Flow diagram



App Registration and Profile

Sign up



02:40

Email:

Password:

Firstname:


Lastname:

Sign up I have an account

SEARCH ME

The sign up screen features a blue background. It contains four text input fields for email, password, first name, and last name. Below the fields are two buttons: 'Sign up' and 'I have an account'. The bottom navigation bar has 'SEARCH' and 'ME' tabs.

Sign in



02:40

Email:

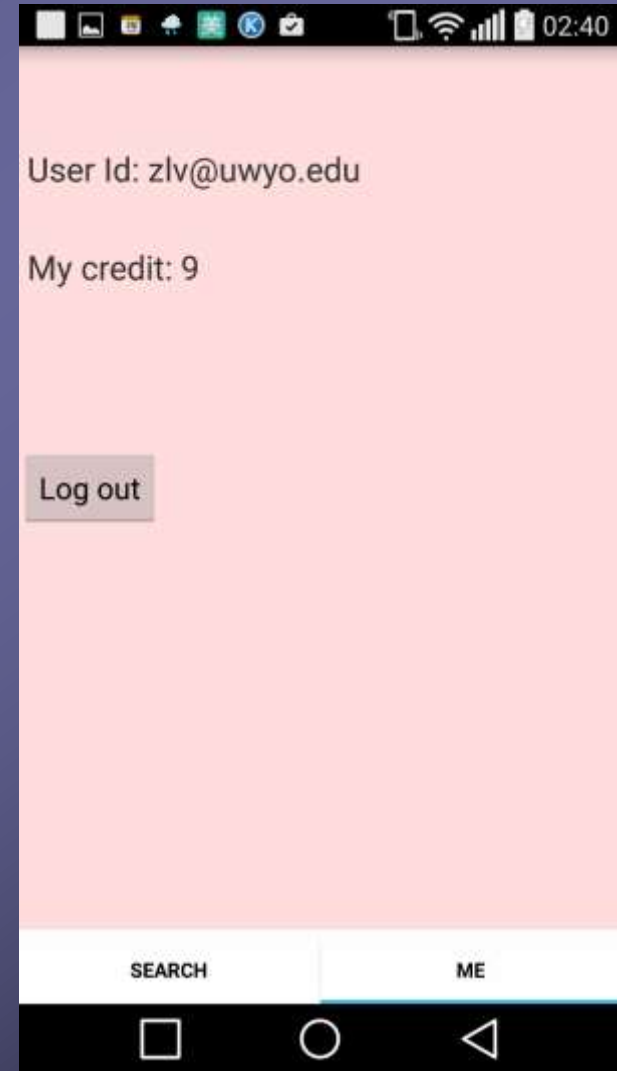
Password:

Sign in

SEARCH ME

The sign in screen has a blue background. It includes two text input fields for email and password, followed by a 'Sign in' button. The bottom navigation bar shows 'SEARCH' and 'ME' tabs.

Account information



02:40

User Id: zlv@uwyo.edu

My credit: 9

Log out

SEARCH ME

The account information screen has a light pink background. It displays the user's ID as 'zlv@uwyo.edu' and their credit as '9'. A 'Log out' button is located below the credit information. The bottom navigation bar features 'SEARCH' and 'ME' tabs.

App Search Function

Search by class

Course Department:

Course Id:

Course Section:

Search

SEARCH ME

Class information

Depart:ACGT
Id:3610
Section:1
Instructor:STAFF

Donate Request

SEARCH ME

Fill information

Email:
zlv@uwyo.edu

Phone:
3072236998

Submit

SEARCH ME

Textbook information

Please contact the donator!
Email:zlv@uwyo.edu
Phone:3072236998

SEARCH ME

App structure

- Languages

- Android SDK
- Java: 1000 lines of code

- Libraries used in app

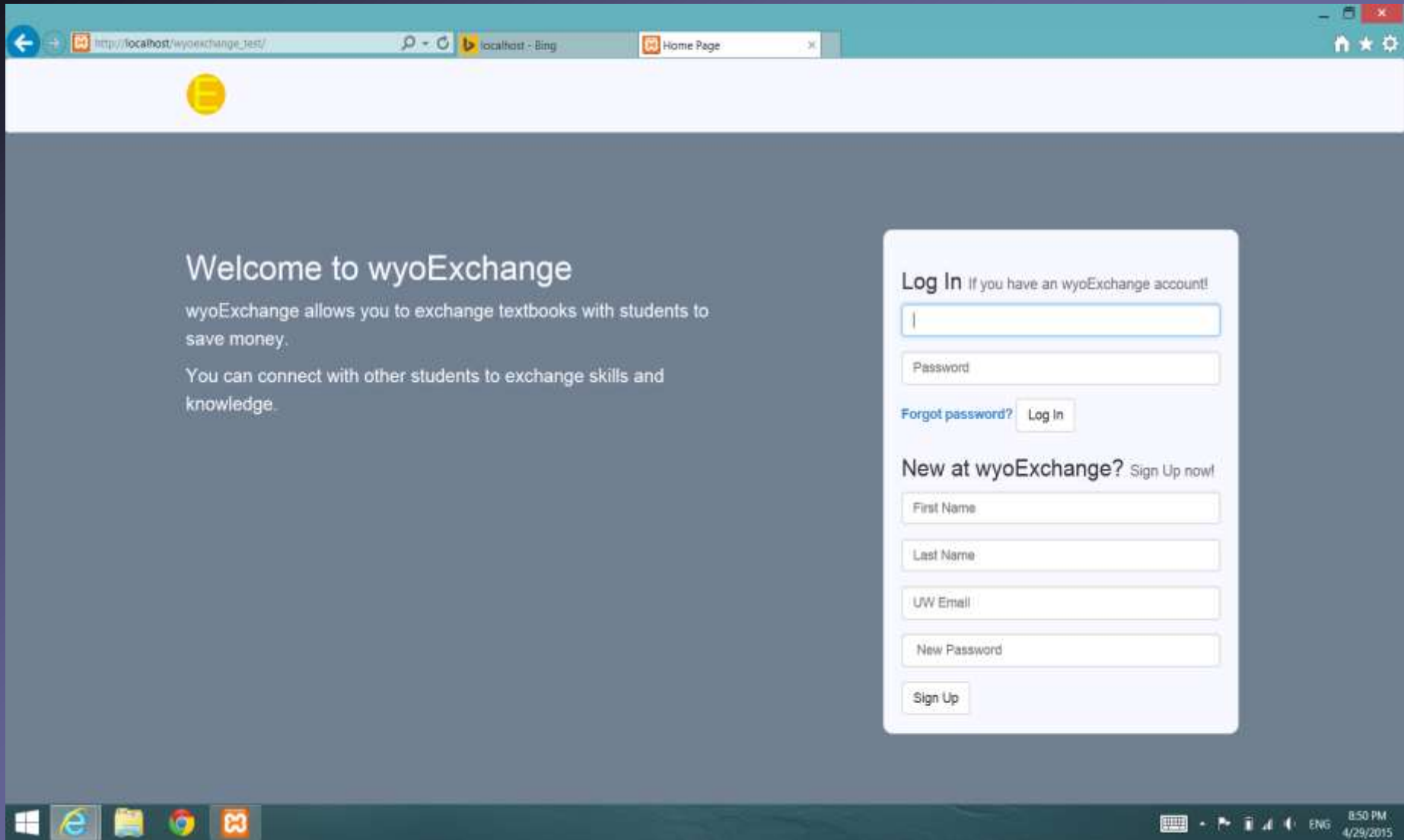
- Json-lib

JSON-lib is a java library for transforming beans, maps, collections, java arrays and XML to JSON and back again to beans and DynaBeans.


- HttpClient

HttpClient allows asynchronous calls that will not **choke** the UI thread.

Website Home Page



http://localhost/wyoexchange_test/ localhost - Bing Home Page



Welcome to wyoExchange

wyoExchange allows you to exchange textbooks with students to save money.

You can connect with other students to exchange skills and knowledge.

Log In If you have an wyoExchange account!

[Forgot password?](#)

New at wyoExchange? [Sign Up now!](#)

Windows taskbar: Internet Explorer, File Explorer, Chrome, Firefox, 8:50 PM, 4/29/2015

Website Search Page

The screenshot shows a web browser window with the address bar displaying `http://localhost/wyocexchange_test/search.php`. The page content consists of eight identical search results arranged in a 4x2 grid. Each result is for the book "Murach's php and mysql" by Joel Murach, published by Murach's Publication, with ISBN 9776564563446 and Course No: COSC2260. Each result includes two buttons: "Get It" and "Donate". The browser's taskbar at the bottom shows icons for Windows, Internet Explorer, File Explorer, Google Chrome, and a custom icon. The system tray on the right shows the time as 8:55 PM on 4/29/2015.

Search

Profile Account

Murach's php and mysql
Author: Joel Murach
Publisher: Murach's Publication
ISBN: 9776564563446
Course No: COSC2260
Get It Donate

Murach's php and mysql
Author: Joel Murach
Publisher: Murach's Publication
ISBN: 9776564563446
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Get It Donate

8:55 PM
4/29/2015

Website Structure

- Languages
 - HTML / CSS
 - Javascript
 - 560 total lines of code
- Library used in Website
 - Twitter Bootstrap
 - Front end library used in the creation of user interfaces

Back end structure

- Database
 - Mysql
- Server Language
 - PHP: 500 lines of code
- Library used in server side
 - Snooppy

Snoopy is a PHP class that simulates a web browser. It automates the task of retrieving web page content and posting forms, for example.

Difficulties Encountered

- Collecting all the textbook data (data scratching)
- Parsing multiple two-dimensional arrays from JSON string
- Synchronous and asynchronous data connection

Future Development

- Implement the ability to donate/request more than 1 book at a time
- Finish construction of website
- Improve UI
- Implement class groups
- Expand to all universities

Questions

Thanks to: Dr. Ruben Gamboa