

MICHIGAN STATE
UNIVERSITY

Project Plan

In-School Banking Program

The Capstone Experience

Team MSUFCU

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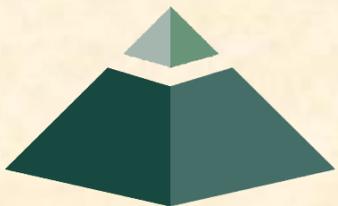
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Fall 2013



From Students...
...to Professionals

Project Overview

- Get students interested in saving money
- MSUFCU Micro-Branch in local elementary and middle schools
- iPad app as "Piggy Bank of the Future"
- Run by parent volunteers
- Creates summary for both students and MSUFCU branch

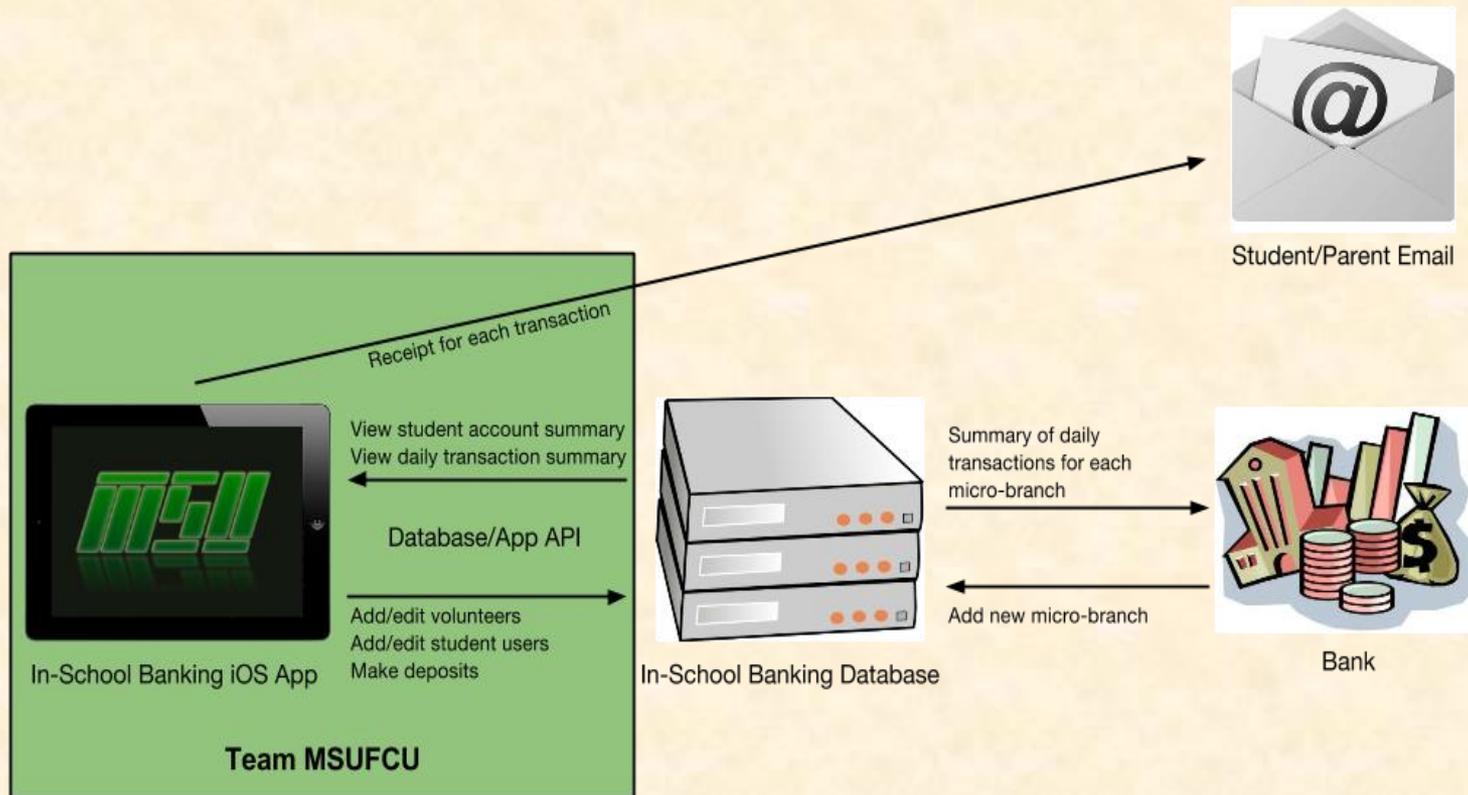


Functional Specifications

- Provide an intuitive user experience
- Parents can:
 - Make deposits
 - View student deposit history
 - Edit previous transactions
- Administrators can:
 - Add students to the program
 - Edit student information
- Emails transaction receipt to student/parent



Functional Specifications



Design Specifications

- Focus on usability
 - Intuitive layout
 - The “Oops” factor
- Vertical tab bar controller
- Filter reports by student
- Both retina and non-retina images



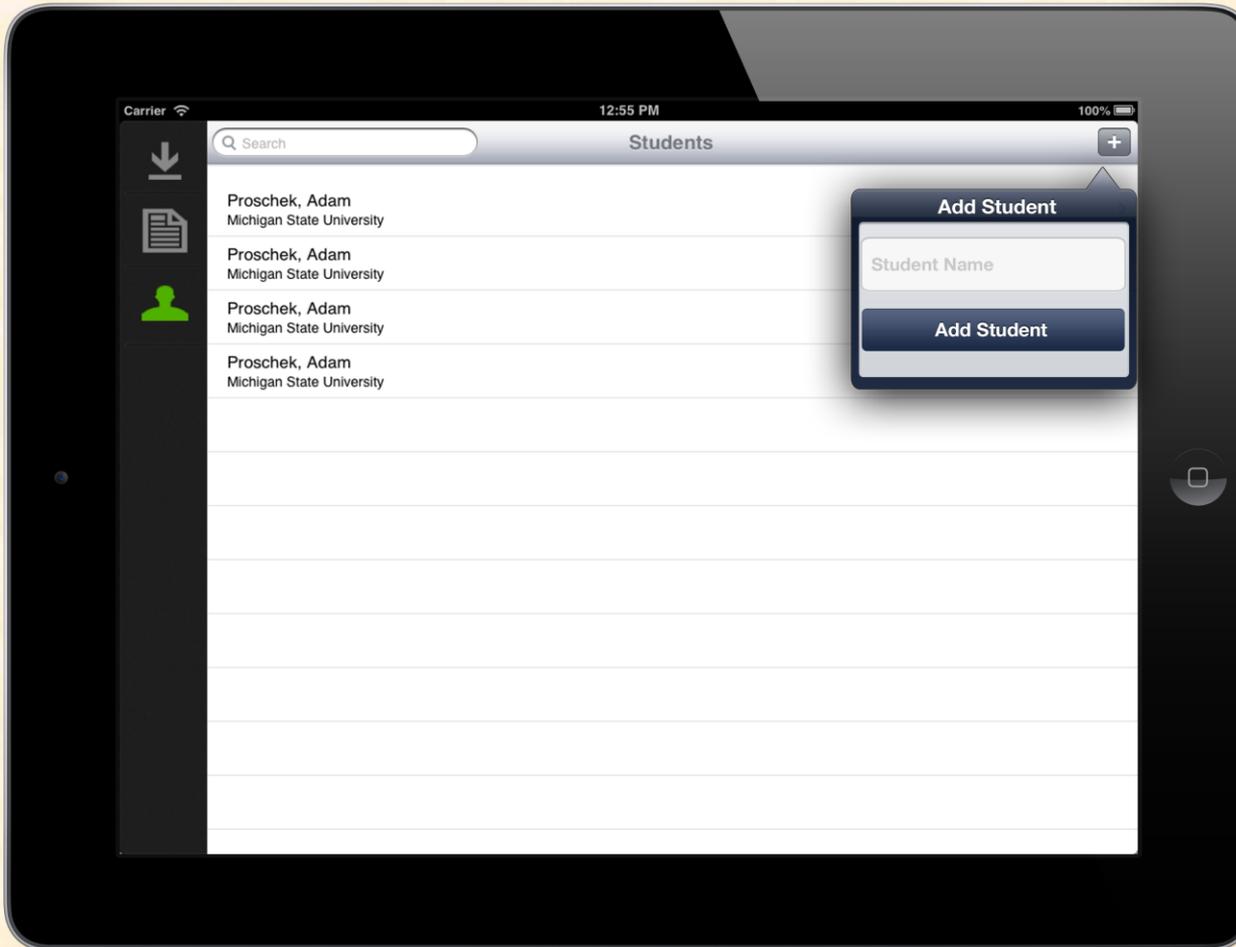
Screen Mockup: Login



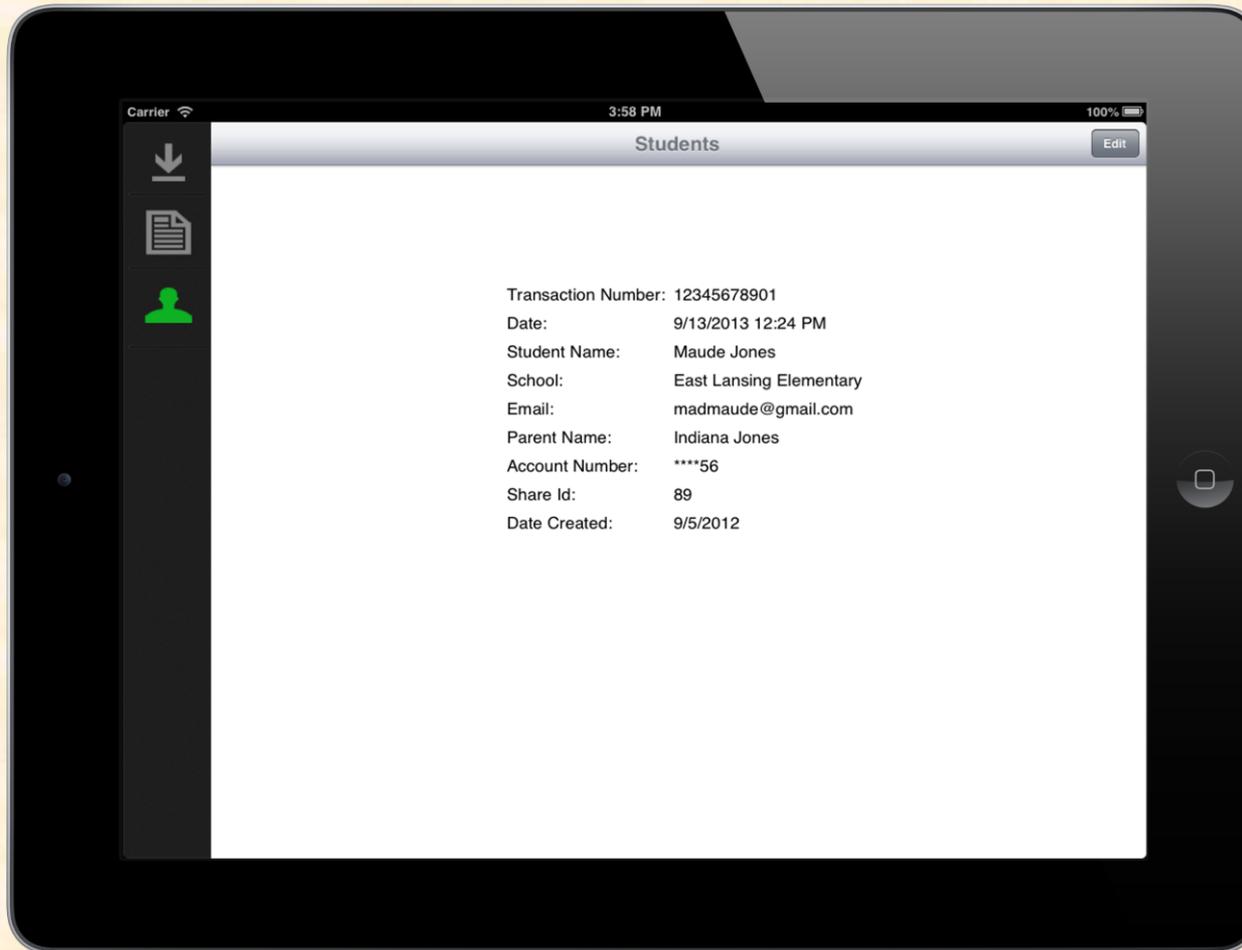
Screen Mockup: Create New User



Screen Mockup: Add Student



Screen Mockup: Edit Student/ View Student Account Summary



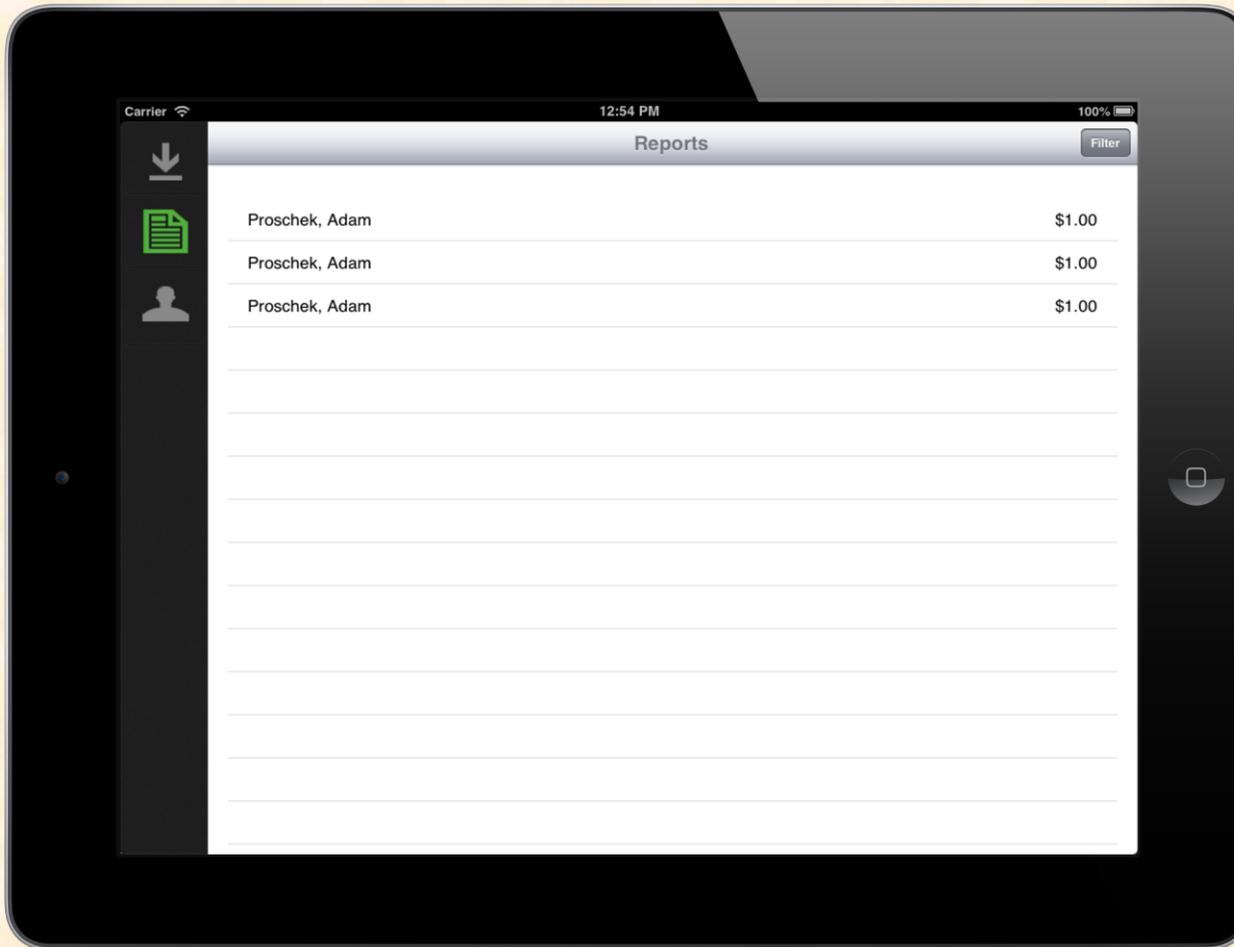
Screen Mockup: Accept Deposit

The image shows a tablet displaying a mobile application interface for accepting a deposit. The screen is titled "Deposit" and features a sidebar on the left with three icons: a green download arrow, a document, and a person. The main content area contains the following form fields:

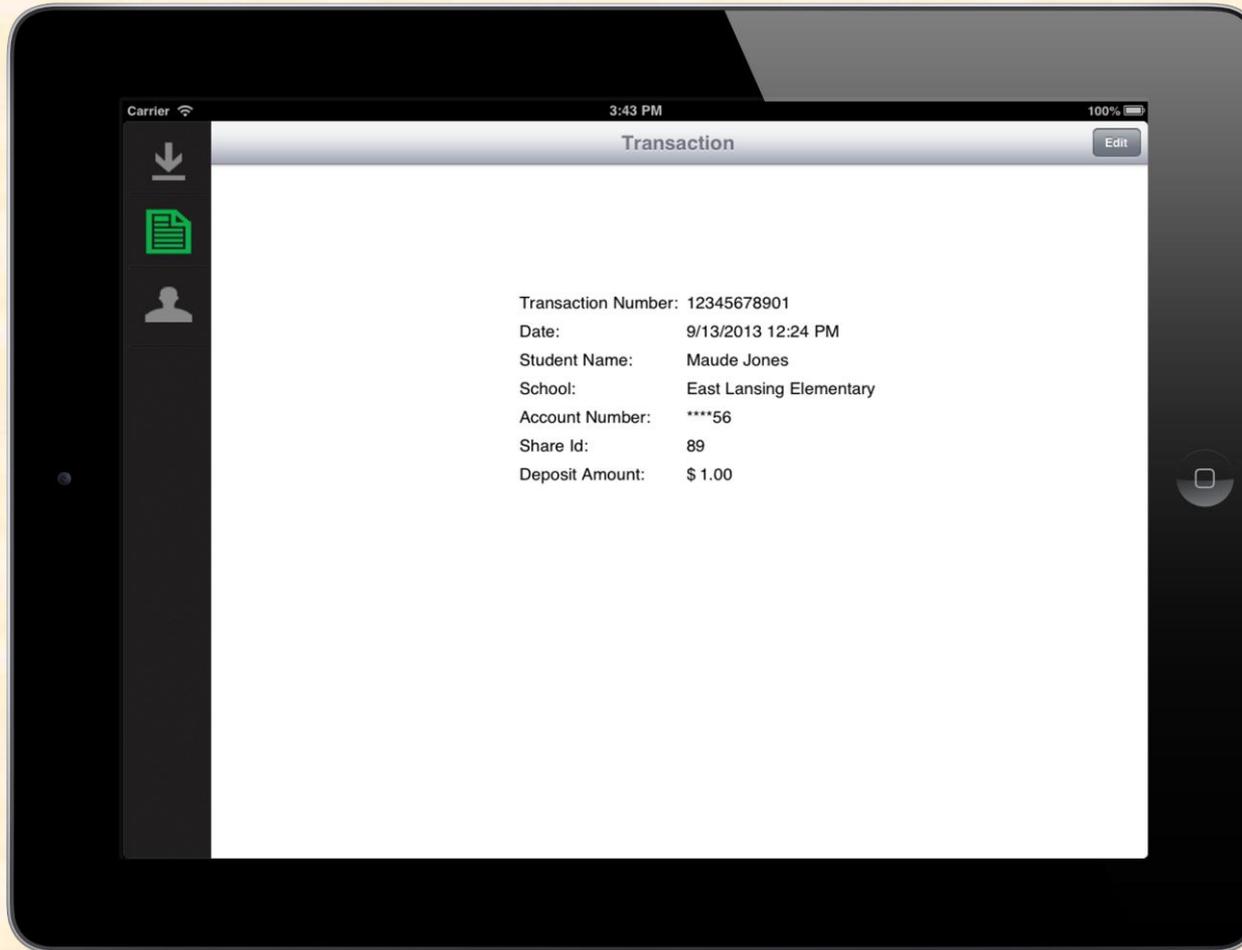
- Student Name:
- School: East Lansing Elementary
- Account Number: ****12
- Share ID: 89
- Deposit Amount: \$

A "Submit" button is located at the bottom of the form.

Screen Mockup: View Daily Account Summary



Screen Mockup: Edit Deposit



Screen Mockup: Account Summary Email

Maude's MSUFCU In-School Banking Program Account Summary

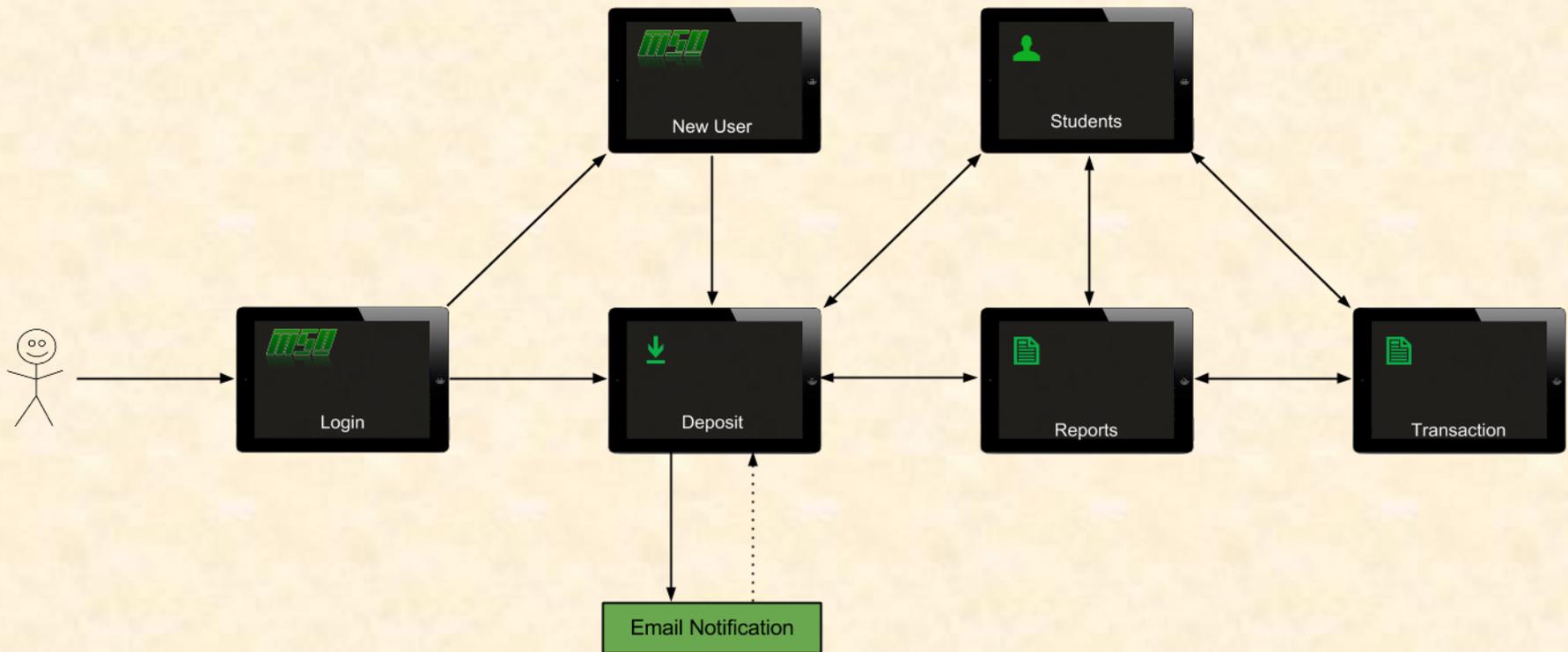


MSUFCU In-School Banking Program <noreply@msufcu.org>
to Indiana Jones

Account Summary for Maude Jones		
Account Total: \$20.00		
Account Transactions		
DATE	AMOUNT	TOTAL
10/02/2013	\$4.00	\$4.00
10/09/2013	\$5.50	\$9.50
10/23/2013	\$3.00	\$12.50
10/30/2013	\$7.50	\$20.00



Simple Use-Case Diagram

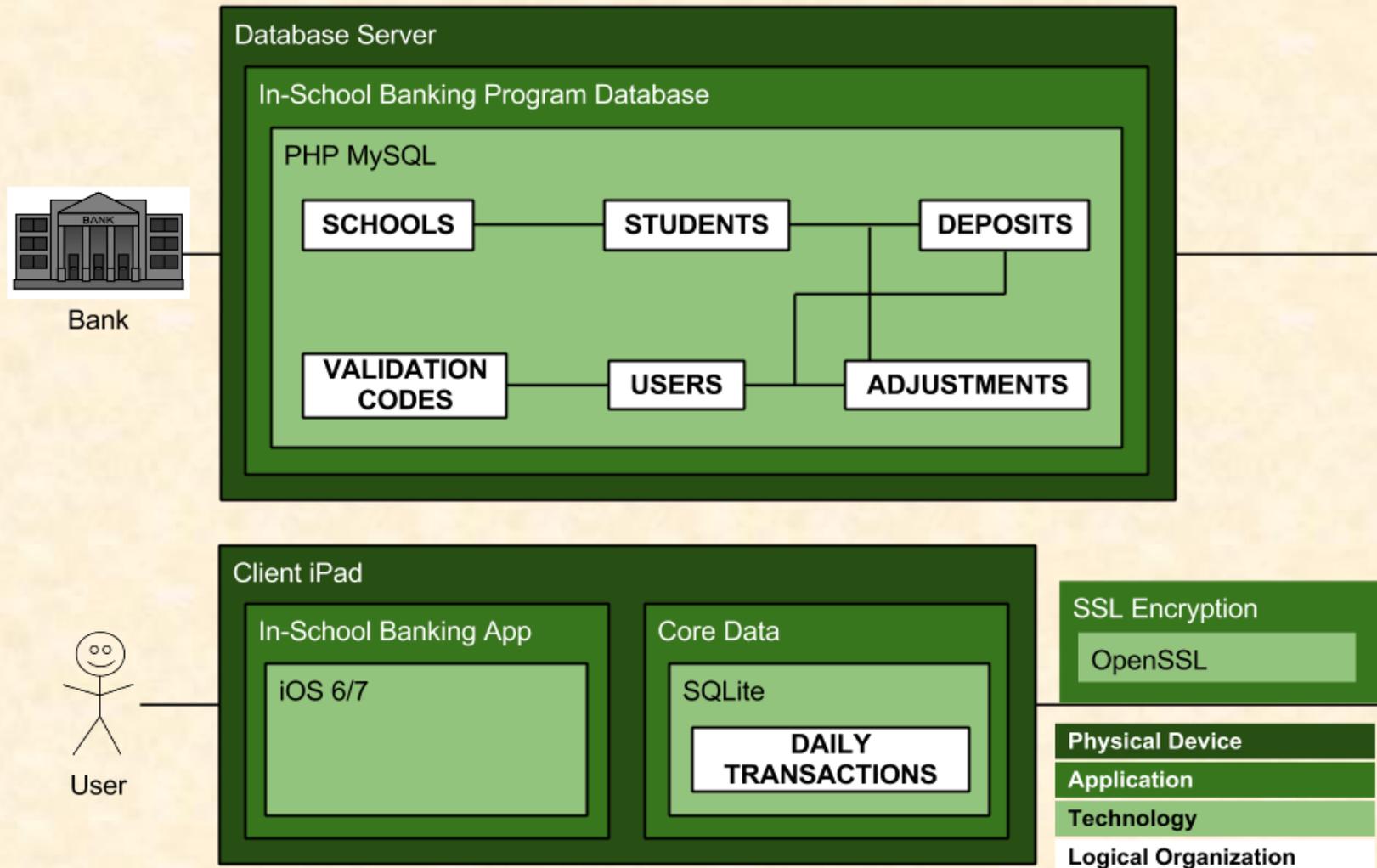


Technical Specifications

- In-School Banking App (iOS 6.0/7.0)
 - Objective-C
 - Core Data (SQLite)
- In-School Banking Database (PHP, MySQL)
- SSL Encryption/Authentication (OpenSSL)



System Architecture



System Components

- Hardware Platforms
 - iPad (2nd generation+)
 - Server
- Software Platforms / Technologies
 - iOS App – iOS 6.0/7.0
 - iOS Core Data – SQLite
 - Database – PHP MySQL
 - SSL Encryption – OpenSSL



Testing

- Unit Testing – Sen Testing
- Test Database – PHP MySQL
- SSL Encryption Testing – OpenSSL
- Usability Testing – Potential users



Risks

- Security
- Integration with existing MSUFCU systems
- Usability
- Scope

