

MICHIGAN STATE
UNIVERSITY

Project Plan

In-School Banking Program

The Capstone Experience

Team MSUFCU

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From Students...
...to Professionals

Project Overview

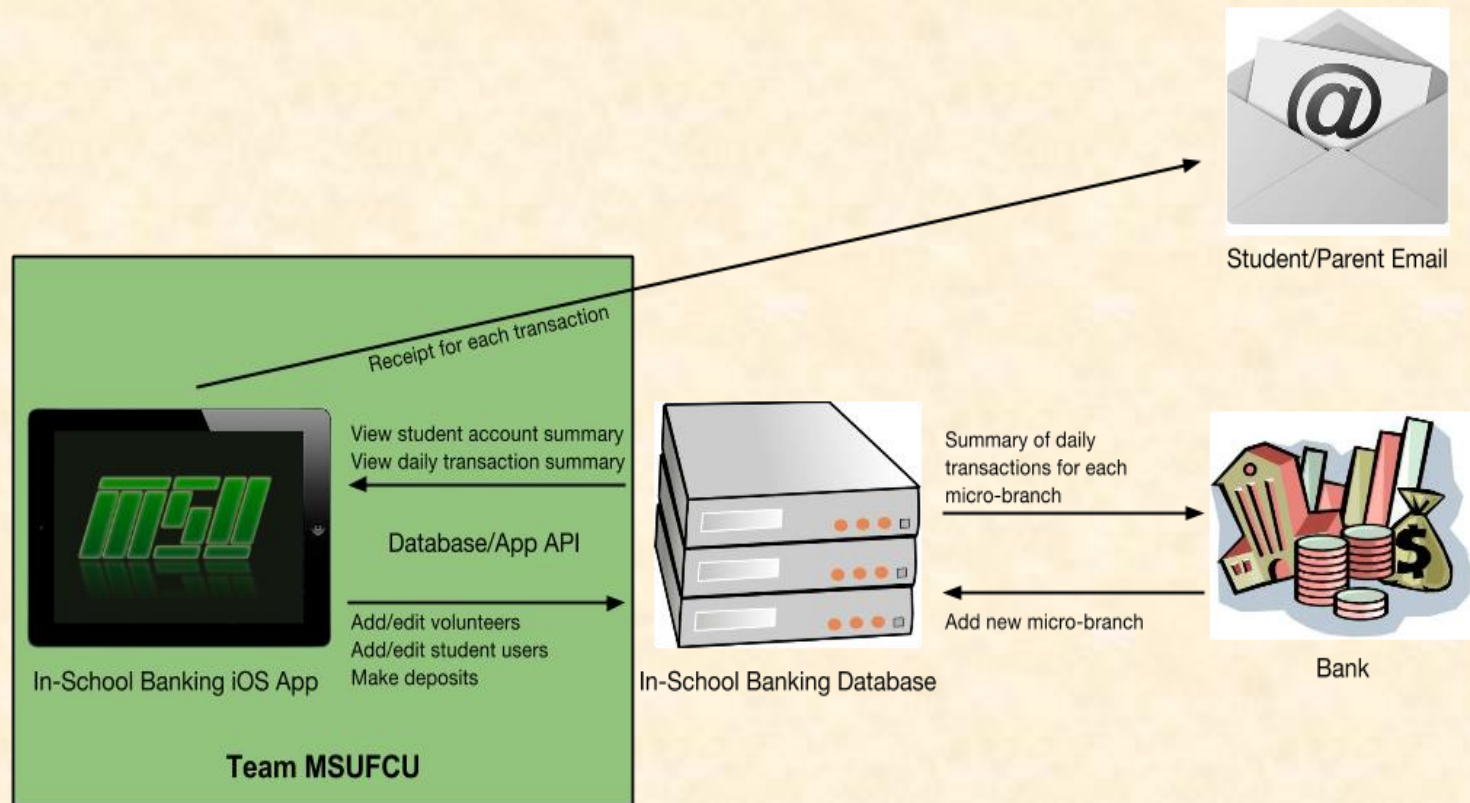
- Get students interested in saving money
- MSUFCU Micro-Branch in local elementary and middle schools
- iPad app as "Piggy Bank of the Future"
- Run by parent volunteers
- Creates summary for both students and MSUFCU branch



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

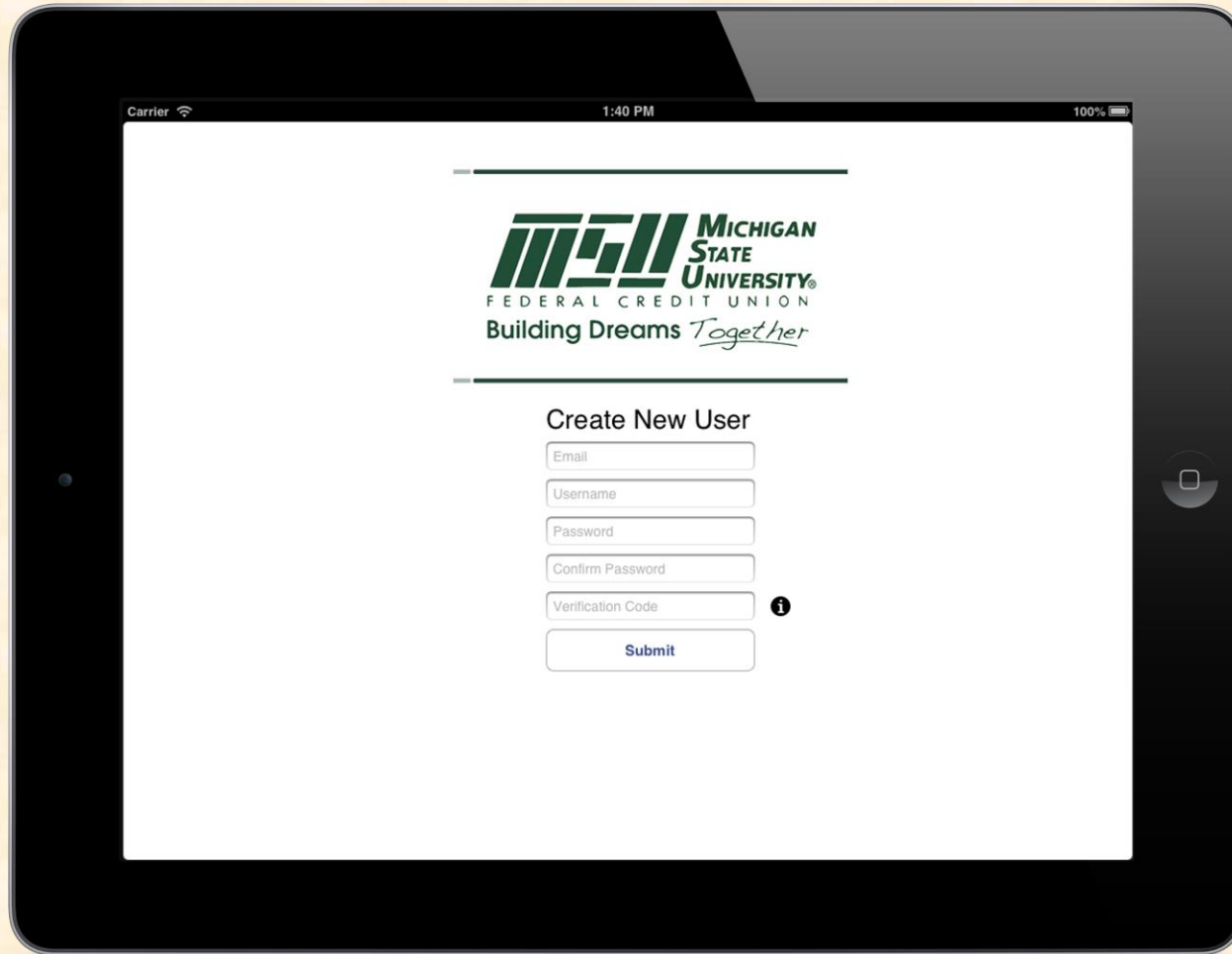
- Focus on usability
 - Intuitive layout
 - The “Oops” factor
- Vertical tab bar controller
- Filter reports by student
- Both retina and non-retina images



Screen Mockup: Login



Screen Mockup: Create New User



The screen mockup shows a tablet displaying a web application for Michigan State University Federal Credit Union. The status bar at the top indicates 'Carrier', '1:40 PM', and '100%' battery. The app header features the MSU logo and the text 'MICHIGAN STATE UNIVERSITY FEDERAL CREDIT UNION Building Dreams Together'. The main content area is titled 'Create New User' and contains a vertical stack of input fields: 'Email', 'Username', 'Password', 'Confirm Password', and 'Verification Code'. An information icon is located to the right of the 'Verification Code' field. A 'Submit' button is positioned at the bottom of the form.

Carrier 1:40 PM 100%

MSU MICHIGAN STATE UNIVERSITY
FEDERAL CREDIT UNION
Building Dreams *Together*

Create New User

Email

Username

Password

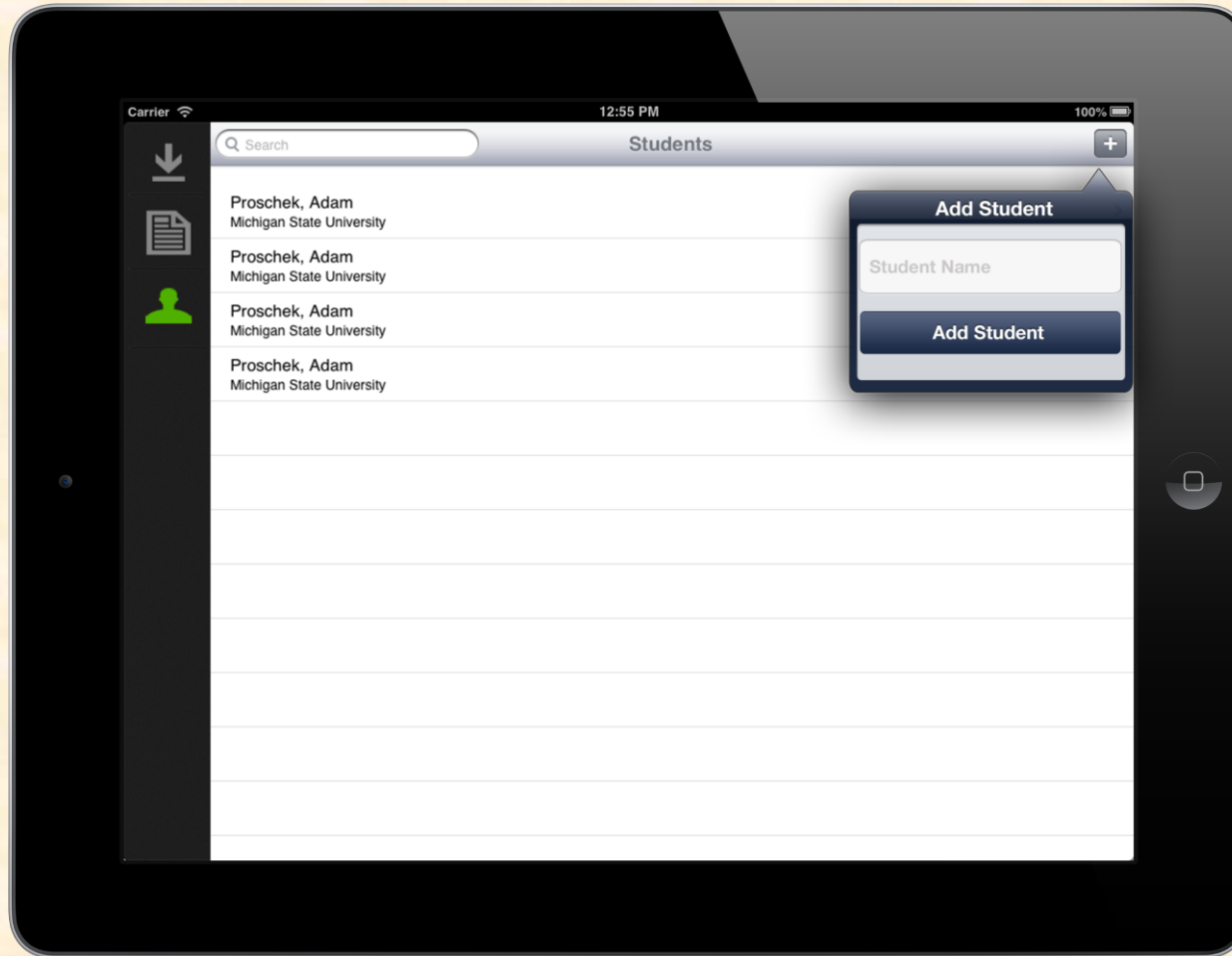
Confirm Password

Verification Code ⓘ

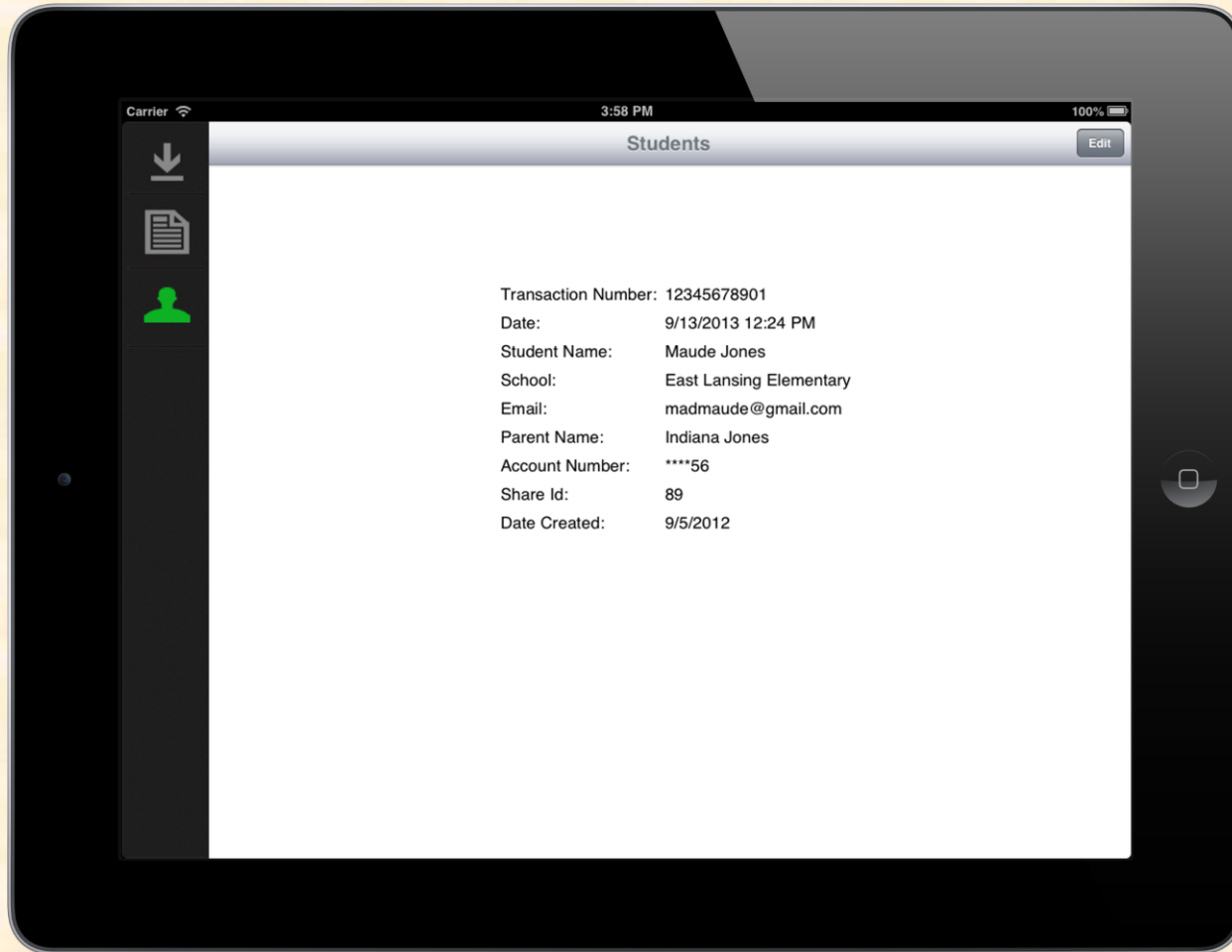
Submit



Screen Mockup: Add Student



Screen Mockup: Edit Student/ View Student Account Summary



Screen Mockup: Accept Deposit

Carrier 12:50 PM 100%

Deposit

Student Name:

School: East Lansing Elementary

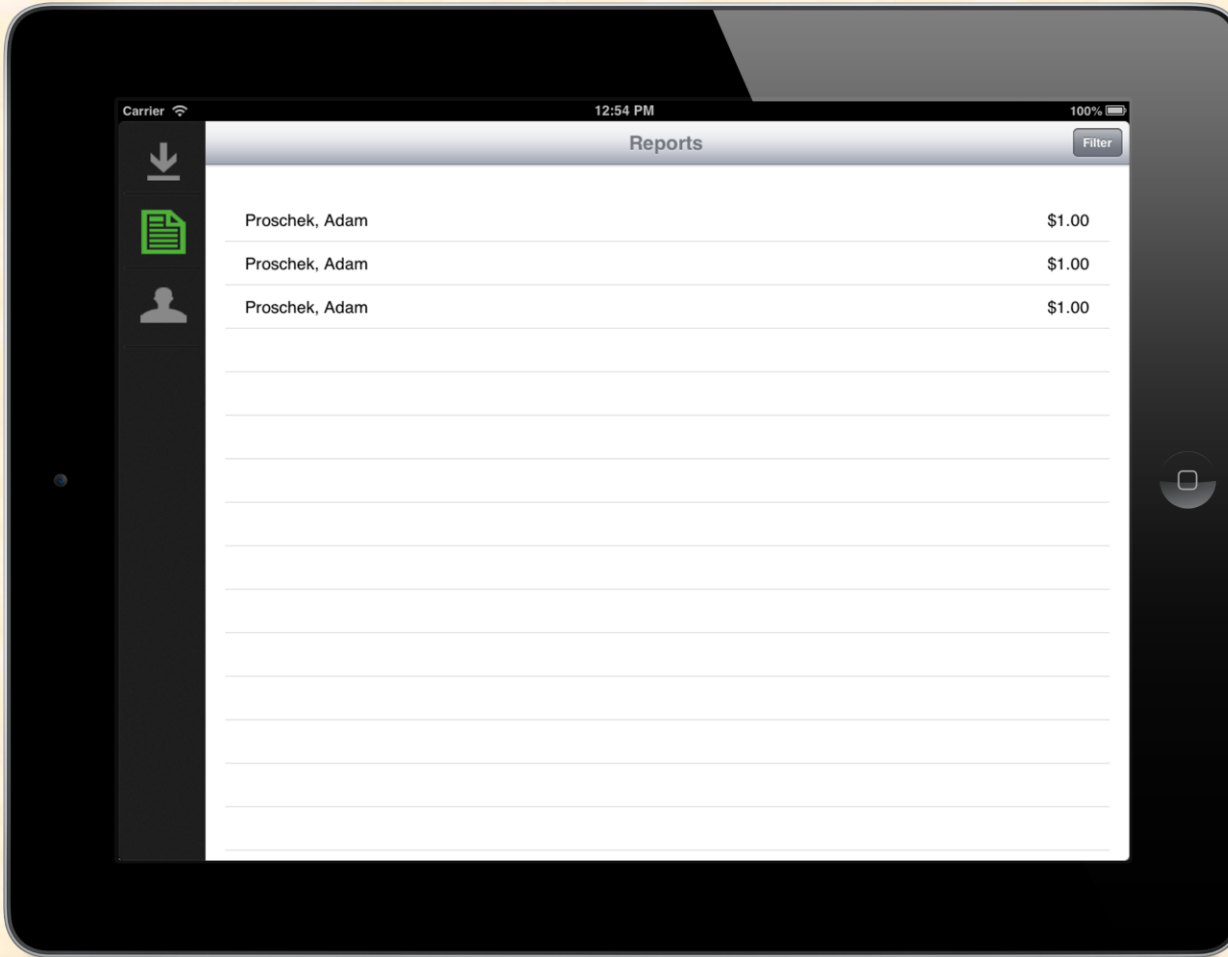
Account Number: ****12

Share ID: 89

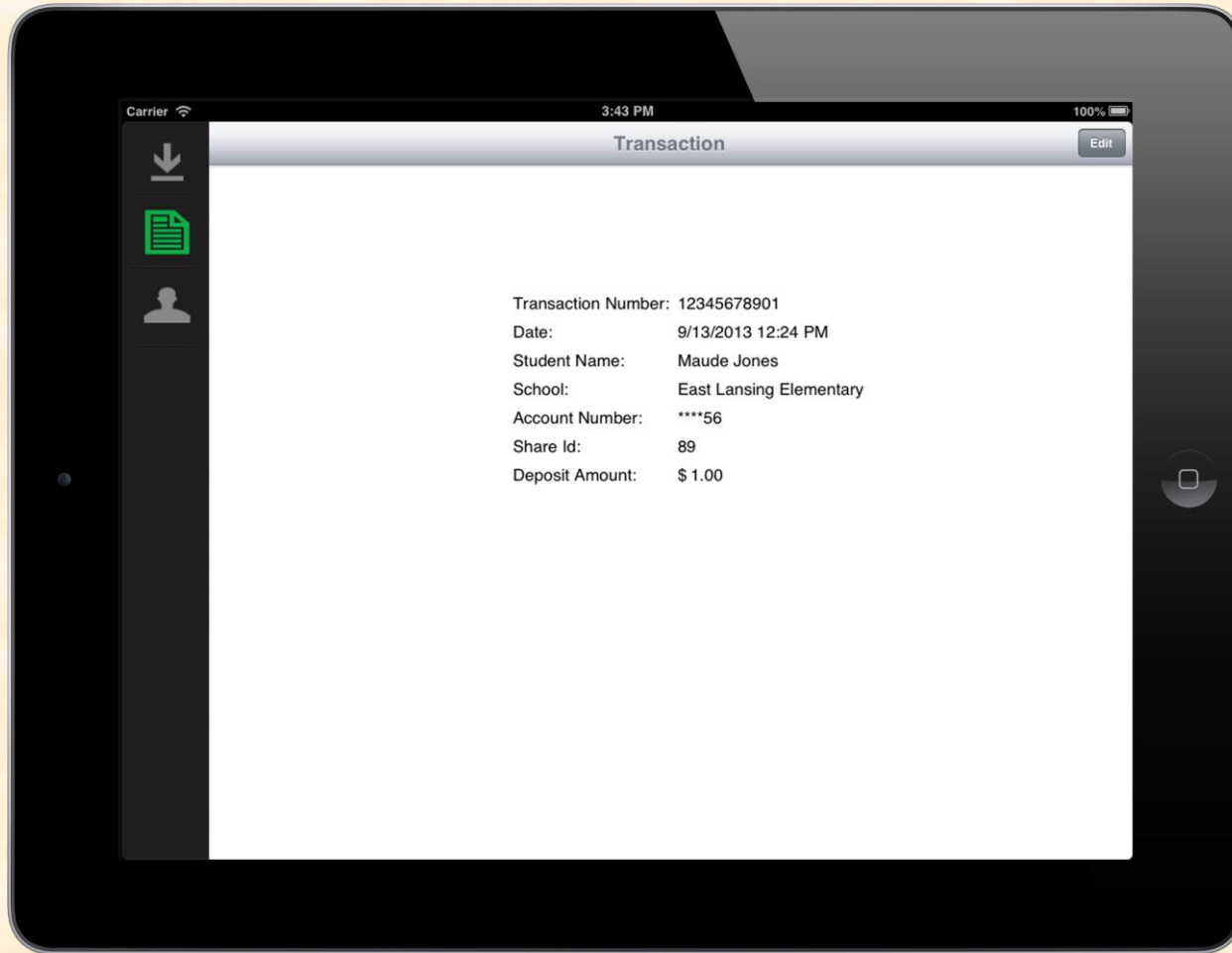
Deposit Amount: \$



Screen Mockup: View Daily Account Summary



Screen Mockup: Edit Deposit



Screen Mockup: Account Summary Email

Maude's MSUFCU In-School Banking Program Account Summary

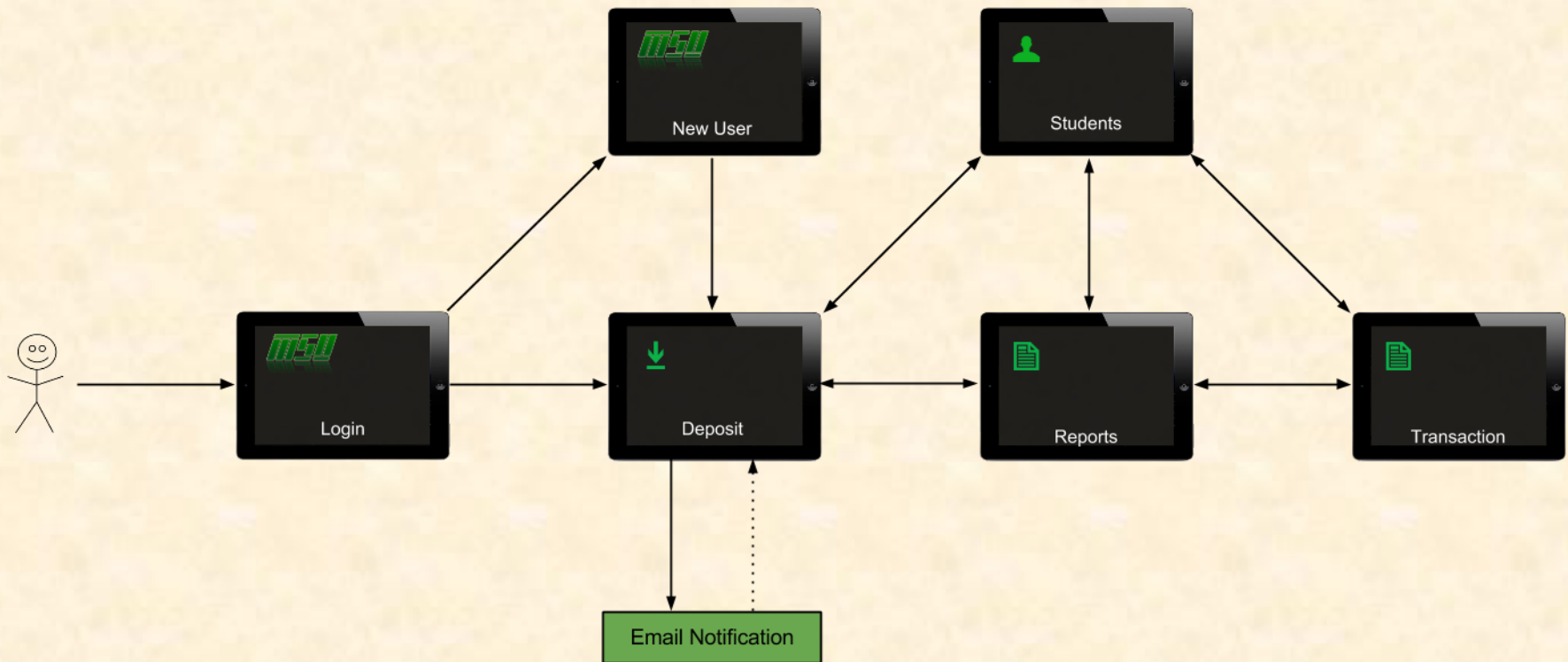


MSUFCU In-School Banking Program <noreply@msufcu.org>
to Indiana Jones

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



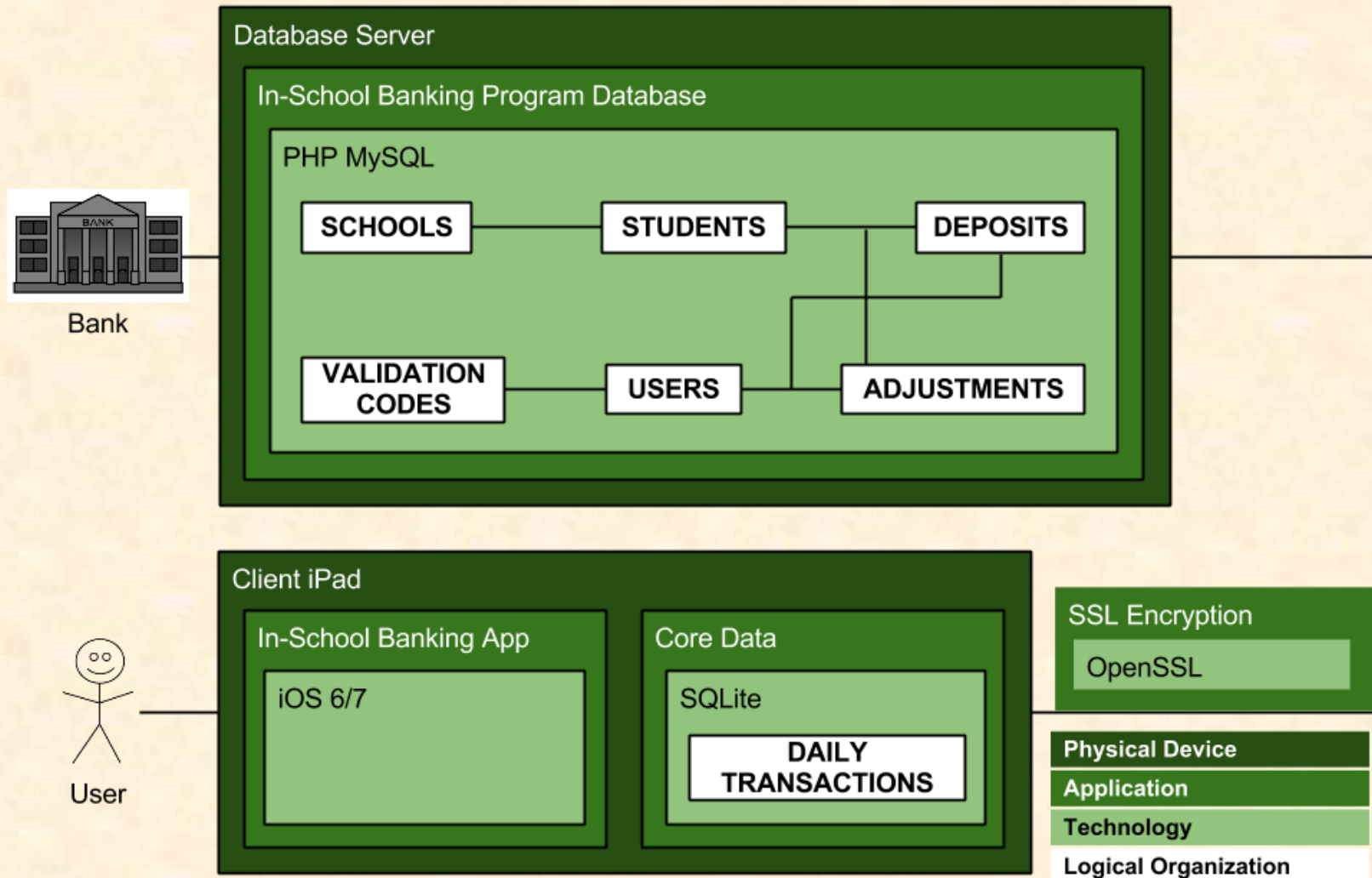
Simple Use-Case Diagram



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

