

SOEN 6481

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Overview

Aim

- To develop a secure and maintainable system to manage travel cards online
- To save time of travellers by bringing system online and allowing user to manage travelling
- Allow user of OPUS to have view of entire history of his/her travel and transactions.

Collaboration Tools and Patterns

One of the hallmark features of Trello is that it's really easy to collaborate and work with others. Whether it's co-workers, a spouse, or some friends, Trello boards give everyone a shared perspective. You can view everything you need and access all of the information in one place.



Figure: Trello logo

Collaboration Tools and Patterns (cont..)

- Share expectations
- Fill knowledge gaps
- Centralize work product management
- Regularly check requirements fulfillment **Live Demo with CI/CD**



Figure: Overleaf logo



Figure: Github logo

Stakeholders

- Quebec Government
- STM Office Management
- iGo Developers
- iGo Business Analyst
- iGo Project Manager
- STM Business Analyst
- STM Project Manager

Implemented User Stories

An existing iGo user login iGo website by providing credentials to use services offered by iGo. **Priority: High**

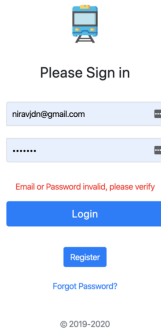
Acceptance Tests

- *Email Format Rule: The rule is an email string must contain the symbol "@" with characters and "@" doesn't appear at the end of a string.
- *Password Format Rule: User's password must be more than 8 characters.

Extension

- When credentials given by user are invalid, system shall show proper error message.

Screenshot



Please Sign in

niravjdn@gmail.com

Email or Password invalid, please verify

Login

Register

[Forgot Password?](#)

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Figure: User story 3 Implementation

Screenshot

[iGo](#) [Home](#) [Manage Opus Cards](#) [niravjdn@gmail.com](#)

Load OPUS Cards

Opus Card Details
Opus Card Number
7132819765986
Current Balance
100

Write your name in the right fields. Also write your imaginary card number.
By clicking CCV field card will turn.

Payment Information	
First Name <input type="text"/>	Surname <input type="text"/>
Card Number <input type="text"/>	
MM / YY <input type="text"/>	CCV <input type="text"/>
SUBMIT	

Figure: User story 4 Implementation

Implemented User Stories

An existing iGo user having at least one linked OPUS card want to top up his/her OPUS card on iGo using visa/mastercard.

iGo

Home

Manage Opus Cards ▾

niravjdn@gmail.com ▾

Load OPUS Cards

Opus Card Details

Opus Card Number
7132819765986

Current Balance
100

Write your name in the right fields. Also write your imaginary card number.
By clicking CCV field card will turn.

Amount

Payment Information

First Name

Surname

Card Number

MM / YY

CCV

SUBMIT

Figure: User Story 10 Implementation



Figure: Spring Framework

Critical Decision

For choosing Implementation technology, We had two choices.



Figure: Spring Framework



Figure: Yii Framework

Decision Factors

Spring

- Jaav
- Open Source
- Great Community
- Matured
- More option for customization

Yii

- Code Generator
- Active Record
- Good for small scale applications
- Simple
- Limited Option for Customization

Potential Re-use of IGo

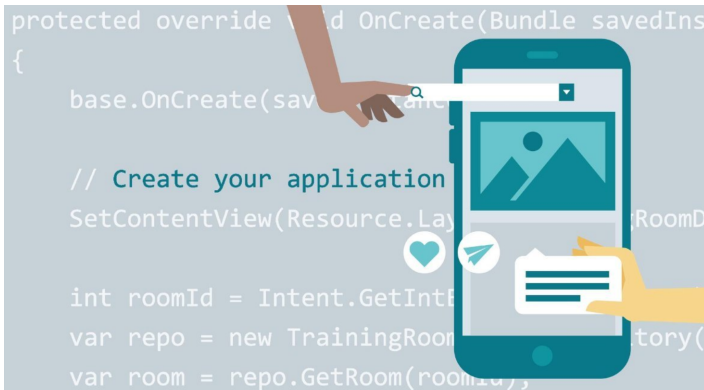
This web based application can be used across any online ticketing system with a few more advancements in terms of criticality.



Code Reusability

Potential Re-use of IGo

Interviews, user stories, personas and other documentations done during the project could be of significant use as they contain vital information of daily users of the system which could be further used to design more advanced systems globally.



Lessons Learnt

Team work and effective collaboration of work



Lessons Learnt

Planning and effective reviewing each other tasks.



Lessons Learnt

Time management



Lessons Learnt

Being Responsible, Adaptable, Creative, Innovative.



Lessons Learnt

Achieving Quality in one's work.



References



Spring vs Java <https://stackshare.io/stackups/spring-vs-yii>



Trello <https://trello.com/en>