

SOEN 6481

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Overview

Ticket Vending Machine system (iGo)

Objective

- iGo system support to link to the OPUS card.
- iGo system is able to load OPUS card online.
- The users for iGo system are able to view the balance of the card.
- The iGo system need to be built maintainable, secure, sustainable, and usable.

Collaboration Patterns

- Share access to resources.
- Give and take productively.
- Grant and generate voice.
- Engage in shared Adaptive Action.

Tools Support

- Trello - help prioritizing the work and keeping organized.
- Github - Continuous integration.
- WhatsApp - All team members keep informed.
- Overleaf - Use the same account to support shared editing.

Stakeholders mind map

Stakeholders : iGo Development team, Quebec Government, Federal Government, STM and General Public

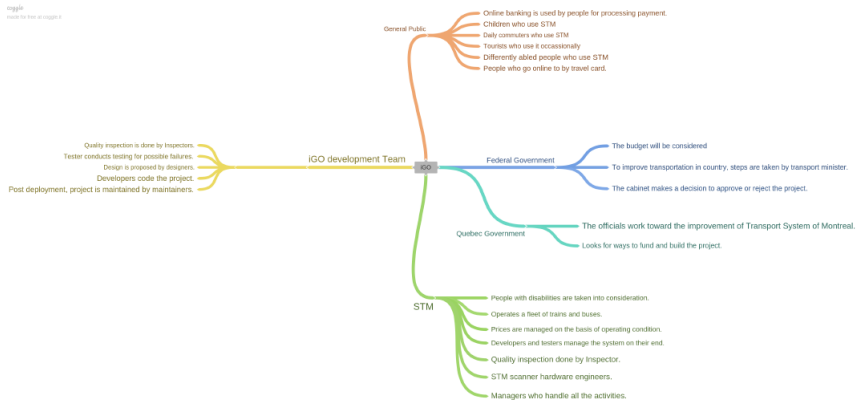


Figure: Stakeholders for iGo

Domain Model

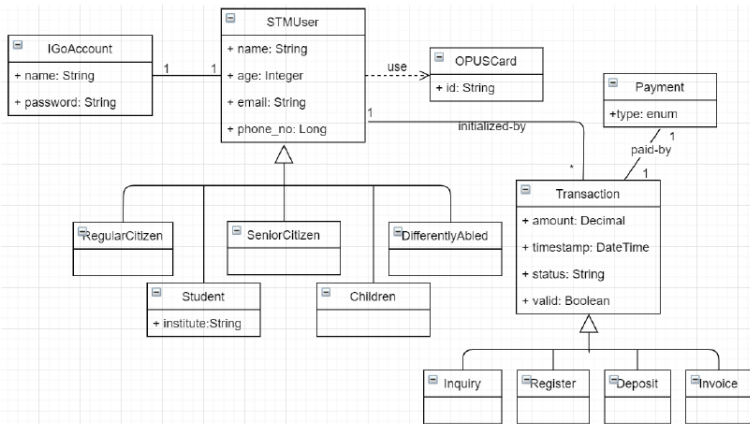


Figure: Domain Model for iGo

Use Case Model -Use Case Diagram

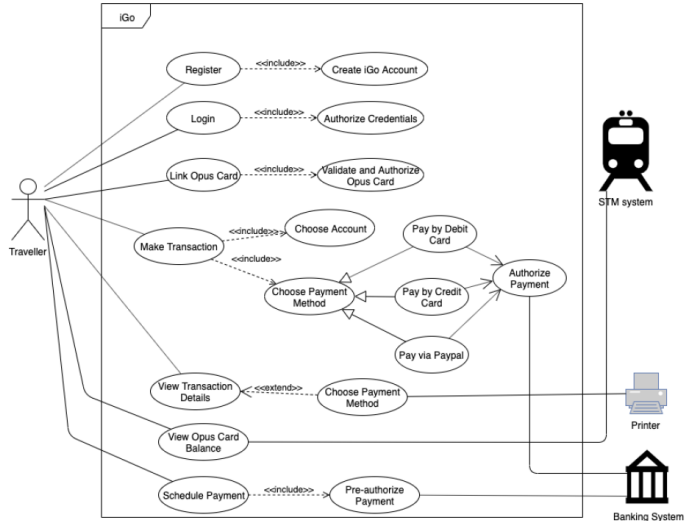


Figure: Use Case Diagram for iGo

Use Case Model -Activity Diagram

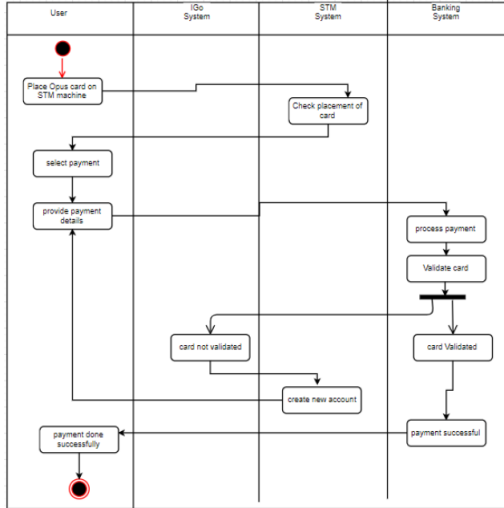


Figure: Activity Diagram for iGo

User Story and implementation result

iGo Login and Register



Please Sign in

Login

Register

[Forgot Password?](#)

User Story and implementation result

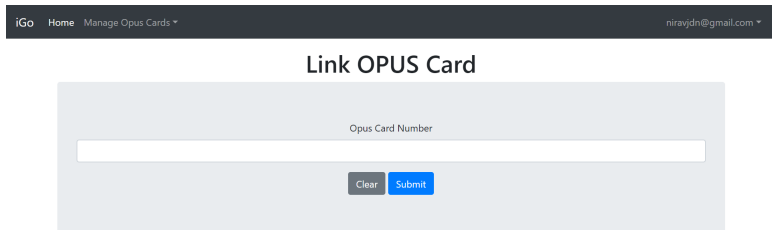
Home Page



Figure: Home Page for iGo

User Story and implementation result

Link OPUS Card



The screenshot shows a web application interface for linking an OPUS card. At the top, there is a dark grey navigation bar with the text 'iGo Home Manage Opus Cards' on the left and 'niravjdn@gmail.com' on the right. Below the navigation bar, the title 'Link OPUS Card' is centered. The main content area is a light grey box containing a form. Inside the form, the text 'Opus Card Number' is centered above a white input field. Below the input field, there are two buttons: a grey 'Clear' button and a blue 'Submit' button.

Figure: Link OPUS Card

User Story and implementation result

Manage Card and Check Balance

The figure displays two screenshots of a web application interface for managing OPUS cards. Both screenshots show a header bar with 'iGo', 'Home', 'Manage Opus Cards', and a user email 'niravjdn@gmail.com'.

Top Screenshot: The page title is 'Manage OPUS Cards'. Below it is a table with the following data:

Id	Number	Balance	Operation
2	1212121212126	10	

Bottom Screenshot: The page title is 'Manage OPUS Cards'. A green message box states 'Card has been unlinked Successfully.' Below this is a table with the following data:

Id	Number	Balance	Operation
3	7132819765986	0	

Figure: Manage Card and Check Balance

User Story and implementation result

Load Card

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: Load Card

Persona

Each user story follows a persona. This is an example for 'iGo Registration' .



Persona for user story 'iGo Registration'

Person Name: Vanessa Abrams

Job/Role Description: University student major in Painting and Drawing (BFA). She studies virtually approach to painting and drawing, from traditional oil painting to graphic novel production and 3D spatial installation.

Goals: Use the iGo system to simplify the opus card relevant operation, and save the time for recharge.

Abilities: Vanessa is a University student and familiar with the computer operation, and get access to the Internet almost everyday at home or campus.

Short narrative: Vanessa is university student Vanessa. She uses the computer almost everyday. In order to finish the school project, she needs to get some information from the website. She also uses computer to download the resources like the notes to review. Sometimes she likes to watch some movies in the weekend with her families. To recap, she is quite familiar with technology, and it is not hard for her to deal with the normal and regular operation with the computer.

In order to get access to the iGo system ,Vanessa visits the register page first and is notified to enter a valid email address and set a password which is defined to be more than 8 characters. For her, the operation is relatively easy and straightforward, she uses the email and set the password is a regular operation.

Figure: Persona

Lesson Learned

From each deliverable, we are able to split things up, and use the previous artifact to support the subsequent step.

- We start with **context of use** to know the usage of the iGo system, and list the stakeholders, in order to present a relative complement **domain model**. Then we use the **use case modeling** technique to model the iGo system from different perspective.
- For D2, we create **user stories** according to the user model, and create **persona** for each to get to know more details, and then we **implement** each user story for further validation.