SOEN 6481
SOFTWARE SYSTEMS REQUIREMENTS SPECIFICATION: SECTIONSS
FALL 2019

iGo

Travel Everyday

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Introduction

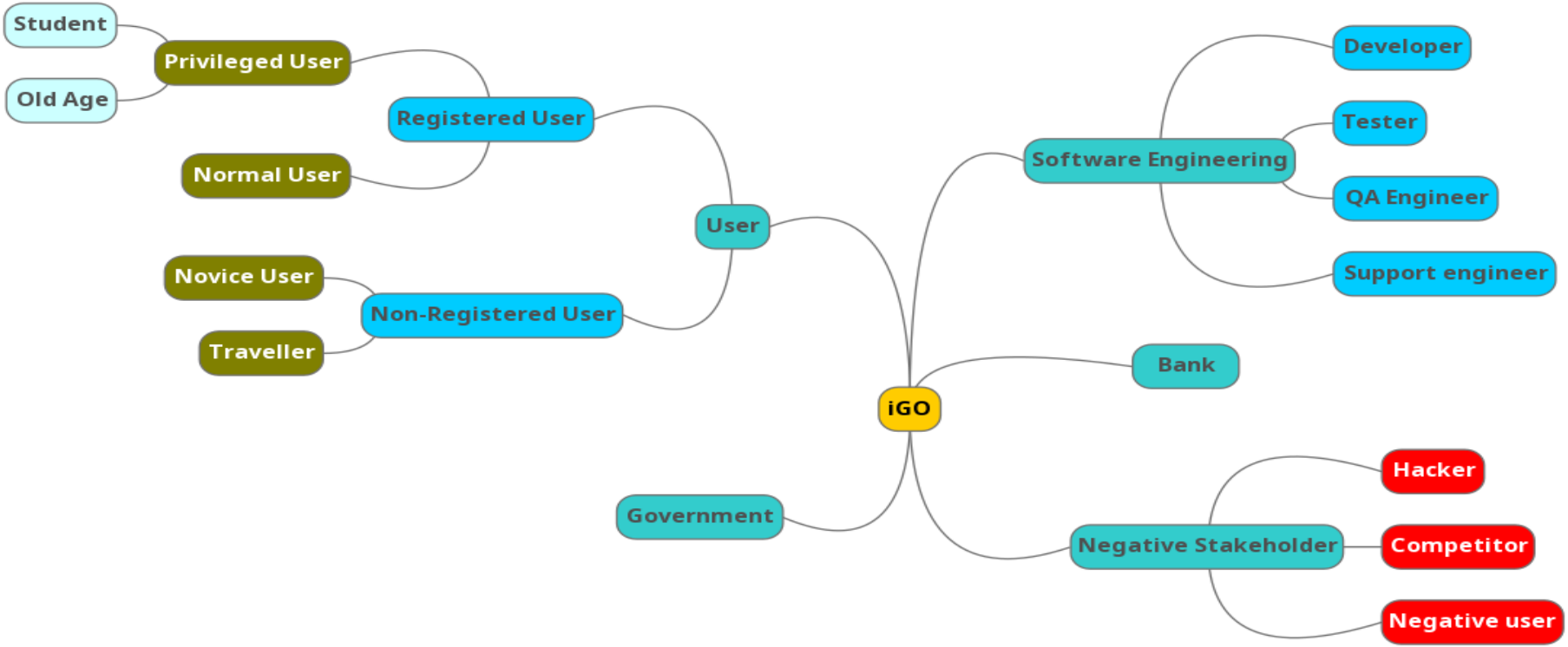
- iGo is an electronic payment system that makes travelling on transit faster and easier
- It works across local transit services in Canada, making paying for your trip simple, convenient and secure
- It allows customers to travel seamlessly across multiple transit agencies with the one electronic fare card by tapping their card at stations and on buses.
- With iGO, it is assumed that metro stations and buses have smart phones/tablets on which the application will be installed, to scan and validate the electronic tickets. With the official iGo app you can manage your card anytime, anywhere.

Stakeholders

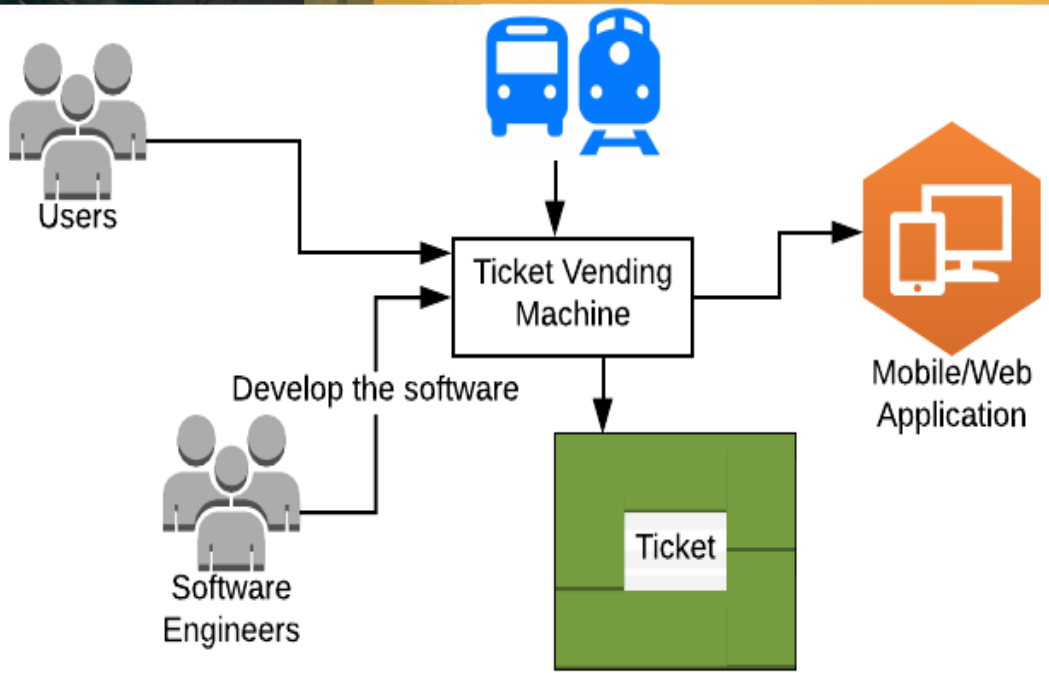
The following are the stakeholders of iGo software, classified based on their influence and importance:

- 1. Users: High influence, High importance.
- 2. Government: High influence, High importance
- 3.Banks: Low influence, Moderate importance
- 4 Software Engineers: High influence, Low importance
- 5.Negative Stakeholders: Low influence, Low importance

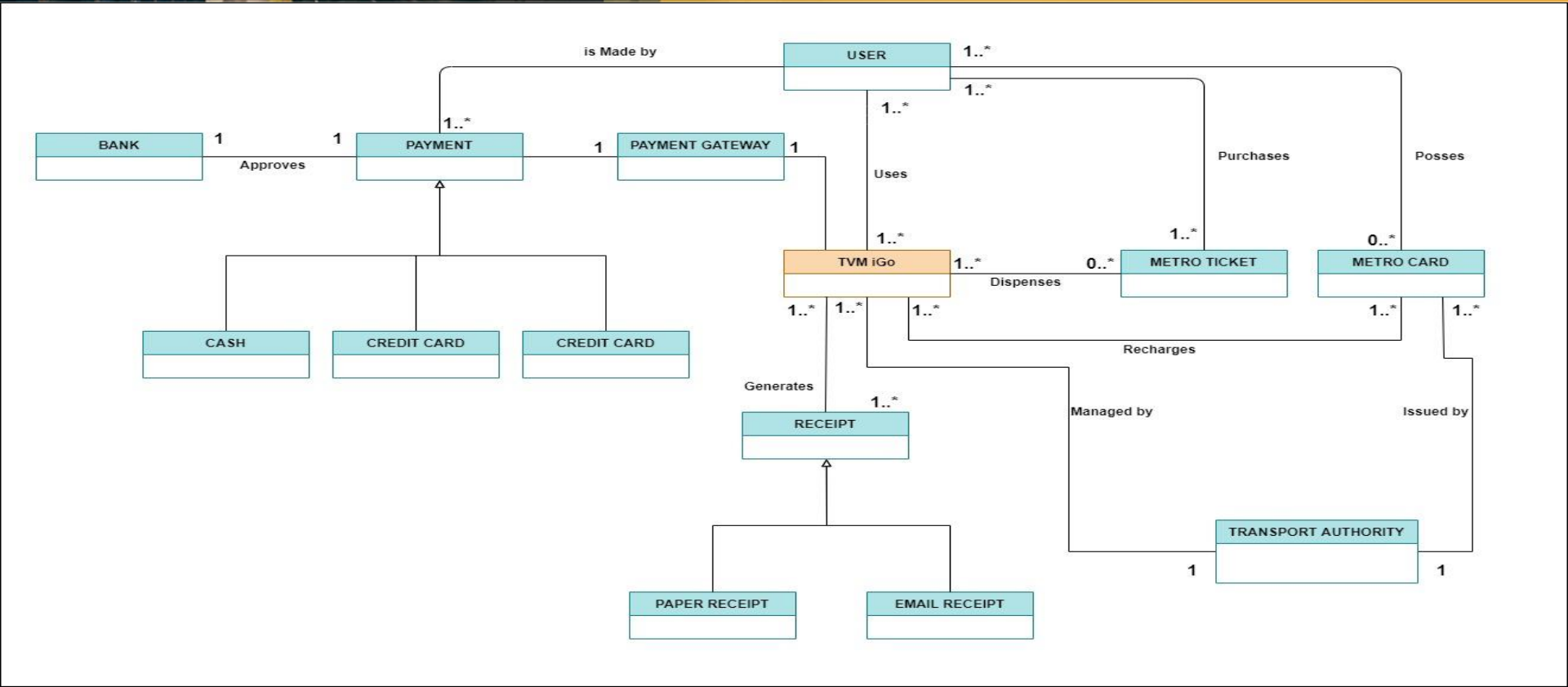
Mind Map Stakeholders



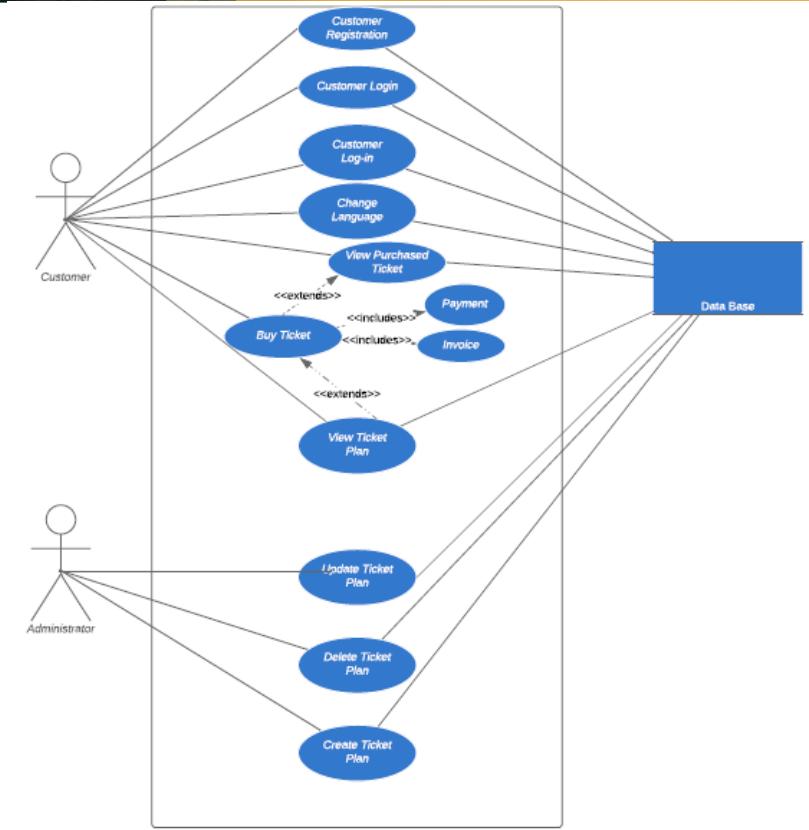
Context Of Use Diagram



Domain Model



Use Case Model



Interview Analysis for User Stories

Based on the analysis of the interview done, the conclusion drawn was the derivation of the following user stories:

1. Registration

2. Users wants to buy ticket online.

3. Senior citizens and students want to buy tickets at concession plan.

4. Users want to recharge iGo card monthly.

5. Effective use of resources.

6. Produce clean and effiecient code that is based on specifications.

User Stories

Id	User Story Description	User Roles	User Goal	Reason	Priority
US1	New user wants to register in the system	Unregistered User	Register to the system	To buy ticket to access the transport facility	4
US2	A registered user wants to log into the system	Registered User	Login to the system	To buy ticket to access the transport facility	4
US3	User wants to buy ticket at concession	Registered User(Senior citizen / Student)	Buy Ticket at a lower price	To get a ticket at a discounted price	3
US4	Government can view the logs of ticket	Government	Document/Log the ticket purchases/use	Analyze the ticket purchases and uses	3
US5	User wants to a buy a monthly/yearly ticket pass for travel	User	Buy monthly/yearly pass	To access the pass facility	5
US6	User wants to make changes to existing ticket plan	User	Make change in existing ticket plan	To modify ticket plan	2
US7	User wants to recharge card online	User	Recharge ticket online	To get online recharge facility	4
US8	User wants to get e-receipt upon purchasing a ticket	User	Get e-receipt	To get a receipt online	4
US9	A user want to select the different plan options	Registered User	Select the available travel plans	To buy ticket plan to access the transport facility	4
US10	A user buy the ticket and get confirmation	Registered user	Enter the card details and buy the ticket plan	To buy ticket plan to access the transport facility	5

Traceability Matrix

User story name		Interviews / Survey	Use cases	User story	Previous Project	Academic Research
Registration	US1	X	X		X	
Login	US2		X		X	
Buy ticket at a concession (Senior Citizen/Student)	US3	X		X		
View Ticket Log	US4		X			
Buy a pass(monthly/yearly)	US5	X		X	X	
Modify ticket plan	US6	X		X		
Recharge card online	US7	X		X	X	
Generate e-receipt	US8	X	X			X
Ticket Plan	US9	X	X			
Buy Ticket	US10		X			

Collaboration Pattern

For this project, a number of student collaboration patterns were used. Some are:

1.We centralized product work management using Google Docs to ensure that all team members had access to the latest artifacts versions.

2. We Managed the project by assigning various tasks with deadlines to all members of the group.

3. We Regularly checked to ensure our project was in line with the project description.

4. We Started Working on the project immediately

Criticat Decision

Some of the major decisions for our project includes:

1. Scope: our project covered just creating Tickets that were functional for Metros and Buses only and the types of tickets were also limited.

2. Our interview and the number of interviews taken for user stories was also another critical decision as we wanted to ensure it properly covered the population.

3. Assigning use cases and stakeholders priority was another critical decision.
4. The types of users for our product.
5. The stakeholders in the project.

Reuse Potential

- The iGO TVM developed can be extended to any mode of travel systems and it can be implemented in any city or province in Canada.

Lesson Learnt

1. Collaborating effectively in a team.
2. Respecting each other's views and coming to a conclusion.
3. Critical Decision Making.
4. Extracting the requirements for the project and documenting them.

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Thank
you !!!