

## Week 9 Tutorial

### Goals

1. Identify the key primary actors for the system you are developing.
2. Identify an initial set of use cases based on some of the primary actors.

### Assumptions

1. You understand the material from the lectures in weeks 4 to 7.
2. You have explored the problem domain to acquire a general understanding of possibilities for the system.
3. You have completed a business model canvas for the system.

### Activities

Activity 1 (5 min.)	Your tutor will show you the requirements specification template for the use case modelling project that is on BlackBoard.
Activity 2 (15 min.)	<p>Perform user role modelling for the <i>Visa Processing System (VPS)</i>. The objective is to identify a set of roles that will lead to discovering actors in the use case model. Use the customer segments, and possibly key partners, from the business model canvas (BMC) as a starting point for generating more detailed roles.</p> <ol style="list-style-type: none"> <li>1. Spend 5 minutes brainstorming roles. Individually, each team member should write a potential user role on a sticky note and put it in the centre of the table. Keep adding notes with roles until you cannot think of any other roles. Do not worry about overlap of roles at this stage.</li> <li>2. After you finish brainstorming, spend 5 minutes grouping similar roles together and remove redundancies.</li> <li>3. Use these groups of roles to identify actors in the final 5 minutes of this activity.</li> </ol> <p>You may use an online whiteboard like <a href="#">miro</a> to perform your brainstorming sessions and then use that as a source to create your final set of user roles.</p>
Activity 3 (10 min.)	Pair up with another team. Compare the actors identified by both teams. Did the other team identify different actors that are suitable for your vision of the system?
Activity 4 (10 min.)	<p>Select one actor and produce a set of use cases for that actor. Each use case should be a focussed transaction between the actor and system that achieves a useful result for the actor. Use the value propositions, from the BMC, that are relevant to the actor as a starting point for generating use cases. Revenue streams, and other parts of the BMC, should also inform the development of use cases.</p> <ol style="list-style-type: none"> <li>1. Spend 5 minutes brainstorming use cases. Individually, each team member should write a potential use case on an index card and put it in the centre of the table. Keep adding cards with use cases until you cannot think of any more things the actor will want to accomplish. Do not worry about overlap at this stage.</li> <li>2. After you finish brainstorming, spend 5 minutes removing use cases that are redundant or obviously out of scope.</li> </ol>
Activity 5 (10 min.)	Select another actor and produce a set of use cases for that actor.
10 min.	<b>Break</b>
Activity 6 (30 min.)	Continue identifying use cases for the system.

Activity 7 (20 min.)	Identify potential packages for the use case model, based on grouping uses cases with similar functionality together into a single package. Produce the initial use case diagrams for the system (one for each package).
Activity 8 (Optional)	If you finish identifying the initial use cases you may then prioritise the use cases and select the use cases for which each team member will write a detailed description. Use MoSCoW as your prioritisation scheme.
Activity 9 (Optional)	Each team member should spend 5 minutes writing an initial description of the typical scenario for their use case.
Activity 10 (Optional)	Swap use case descriptions between team members. Have one team member spend 3 minutes to read the typical scenario description of another member and provide a critique of possible improvements for the description. Swap and the other member will then spend 3 minutes to read and critique the first team member's description.

## Required Outcome

You have identified an initial set of actors and use cases for the system.

## Further Work

Continue identifying potential use cases for the system and extend your use case diagram. If you do not complete activities 8 to 10 in this tutorial you will need to do this outside of the tutorial. Complete a draft of sections 2 to 6 of the requirements specification document to bring to your next tutorial. This requires that your team prioritises the use cases so that you are able to identify the important use cases that will be part of the first release of the system. The use cases for which you provide descriptions should be part of release one. Your tutor will review this work in next week's tutorial.

## Resources

You may find a proper UML CASE tool easier to use to create a use case diagram than a simple drawing tool. One recommended tool is Astah (<https://astah.net/products/free-student-license/>). By registering with your UQ student email address you are eligible for a free student license of the professional version of Astah.