Deliverables for Part 3 – System-as-is Model (14%)

Background: To specify and analyze the stakeholders and current customer processes at the Montreal Eaton Centre, you are required to create requirements models of the system-as-is with the help of the User Requirements Notation (URN).

Deliverable: The deliverables for Part 3 are several URN models of the system-as-is (i.e., several jucm files compatible with jUCMNav version 7.0). The deliverables are due on Tuesday, **November 5th, 2019 at 23:59**.

Member Contributions: Each team member must contribute to each project deliverable. A team member who does not contribute to a project deliverable receives a mark of 0 (zero) for that deliverable. A team member may optionally email a confidential statement of work to the instructor ***before the due date*** of the project deliverable. A statement of work lists in point form how team members contributed to the project deliverables. In addition, the statement of work also describes whether the workload was distributed fairly evenly among the team members. A statement of work may be used to adjust the mark of a team member who is not contributing sufficiently to the project deliverable. It is not necessary to email a statement of work, if a team distributed the work for the project deliverable fairly evenly and each team member contributed sufficiently.

1 URN Model

You must use jUCMNav version 7.0 to create and analyze your requirements models. For installation instructions, see the folder of the first URN tutorial in myCourses. See the Submission section for a detailed description of which files need to be submitted.

The first objective of Part 3 is to use goal modeling, feature modeling, and scenario modeling to **specify stakeholders and the current customer processes**. Note to make it easier for your team to work on the URN models, the URN models for this project are not as interconnected as the URN models you have seen in the lecture notes and tutorials.

- Each team member must ***individually take responsibility*** for one stakeholder of the Montreal Eaton Centre project and specify a goal model for that stakeholder. The goal model must assess the current system against the goals of the stakeholder. A team member may not choose the same stakeholder chosen by another team member. The chosen stakeholder must not be the same as any customer type chosen by a team member and should not be a user of the system – pick another kind of stakeholder!
- Each team member must ***individually take responsibility*** for one customer type (persona) of the Montreal Eaton Centre project. You are required to describe these customer types with one configuration of the feature model and specify them in more detail with individual scenario models (see the next two bullet points for more details). A team member may not choose the same customer type chosen by another team member. A customer type may not be the same as any stakeholder chosen by a team member.
- ***As a team***, you must specify one feature model that shows the commonalities and variabilities of the actions performed by the individually chosen customer types during a visit of the Montreal Eaton Centre and any devices/hardware required to perform these actions. In addition, you must specify a feature configuration for each customer type with a strategy, i.e., each strategy defines a system with only one customer type. You must use the "Feature Model Evaluation Algorithm" for your evaluations and select "automatic selection of mandatory features" in the preferences.

The evaluation of each strategy must show that the feature configuration is valid. Note that the jUCMNav tool is not designed particularly well for collaboration. E.g., it is not possible to work on a URN model in parallel and then merge all changes into a new final version. Hence, you may have to take turns editing the feature model.

- ***Individually***, you must specify a scenario model for your chosen customer type. The scenario model must show actions of the customer type in greater detail than the feature model. The scenario model must show the causal relationships of the features in the feature model relevant to the customer type, i.e., which feature must occur before or after another feature, which ones may occur in parallel, and which ones are alternatives. Each feature must be modeled either as a stub or as a responsibility (in the case of actions) and a component (in the case of devices/hardware). If an "action" feature (i.e., the child) is part of another "action" feature (i.e., the parent), then the parent feature must be modeled with a stub and the scenario model elements for the child feature must appear on the plug-in map of the parent feature.

The second objective of this deliverable is to use goal modeling and scenario modeling to **analyze stakeholders and the current customer processes**. The team member who ***took individual responsibility*** for the stakeholder/customer type must perform the analysis of the stakeholder/customer type, respectively.

- To ***individually*** analyze the stakeholder, you must create one strategy for the goal model described earlier. The strategy must describe the impact of the current system-as-is on the stakeholder. You must use the "Feature Model Evaluation Algorithm" for your evaluations.
- To ***individually*** analyze the customer type, you must decide on the two most important scenarios of the customer type in the current system and specify them with scenario definitions for the scenario model described earlier. Augment your scenario model with scenario variables and use them in your scenario definitions. You are not required to use GRL variables for your scenario definitions, but you will have to use UCM scenario variables.

Note that you will expand your URN goal model for Part 4 of the Project. Hence, you will have to correct any issues with your URN goals models for Part 3 for your deliverables for Part 4.

Submission

Your team is required to hand in one ***zip file*** with several URN models (i.e., several ***jucm files***) in myCourses: (a) One jucm file with the feature model. The feature model is created as a team, but each team member adds a feature configuration (strategy) for her/his customer type (persona). The name of the strategy must be <name of persona>_<first name and last name of team member>. (b) One additional jucm file per team member. Each team member specifies a goal model and a scenario model in her/his own jucm file. The goal model including one strategy is for the stakeholder chosen by the team member. The scenario model including two scenario definitions is for the customer type chosen by the team member. Therefore, the feature model is separate from the goal/scenario models. The goal model may include tasks that are similar to features in the feature model and the scenario model may include responsibilities/stubs that are similar to features, but there is no actual connection between these elements and the feature model. This allows each team member to work on the goal/scenario model independently.

Your team must follow this naming convention: *FeatureModel_Group<group number>.jucm* for the jucm file handed in for (a) and *Group<group number><first name and last name of team member>.jucm* for the jucm files handed in for (b).

Marking Scheme

Deliverable for Part 3 of Project	*Marks*
Goal Model – Stakeholder (individual part)	25/35
Goal Model – Strategy (individual part)	10/35
Feature Model	20/30
Feature Configurations (one for each individually chosen customer type)	10/30
Scenario Model – Customer Type (individual part)	20/35
Scenario Model – Scenario Definitions (individual part)	15/35
Total Marks:	100
The total mark may be adjusted based on the actual contributions of a team member to the deliverables.	