Overview: In this lab you will be identifying use cases and generating use case diagrams for the transit application project. Consider **only** the following features for this lab: 1, 5, 6, and 11. Note that this is an individual lab.

Learning Outcomes:

- Understand and create User Stories
- Create_ a Use Case Diagram from your User Stories

Instructions:

Using the transit project description, identify the users/actors (there should several) for the specified features. Write at least one user story for each actor to capture the functionality described in the specified features as well as the goal of the user story. Identify any notable preconditions or postconditions for each story. Although these do not constitute a full use case, place the user story and scenarios together in the use-case template and simply omit the elements of the use case that you are not required to write.

Write at least two "rainy day scenarios" use cases including recovery steps. These should be two completely independent use cases (not two scenarios within a single use-case) that follow the template, including everything except the sunny-day scenario.

Create a **single** use case diagram that captures the actors, use cases, and associations between them. Use shortened descriptions for all use cases in the diagram. You are encouraged to use Powerpoint or any other graphical tool you prefer with to generate this diagram.

Deliverables: A pdf of your user stories, use cases, and use case diagrams (created as described above) should be uploaded to <u>blackboard esubmit</u> before the due date for your section below. Make sure your user stories are numbered to make feedback easier.

Lab Checkoff: You should describe your partially completed user stories to the instructor before the end of the lab period. Note that not everyone will be able to do this right before the end of lab, so when you have at least two user stories written, feel free to call the instructor over for feedback. For the morning section, this should be completed by the end of the lab period. For the afternoon section, this must be completed by the end of class on Thursday.

Optional suggestions: Although you are not required to write sunny-day scenarios, I recommend that you do, because it makes writing the rainy-day scenarios easy: Just identify a step that could go wrong, copy the scenario up to that point, and continue the scenario from there, completing the narrative.

Due Date:

- Morning section: Start of class, Thursday of Week 2.
- Afternoon section: Start of lab, Wednesday of Week 2.

Grading:

TOTAL	100%
In class checkoff	10%
Use Case Diagram	25%
Rainy day Use Cases	20%
Preconditions/postconditions	15%
User Stories	30%