TidBIT

Hero vs. Dragon
UML Use Case Diagram

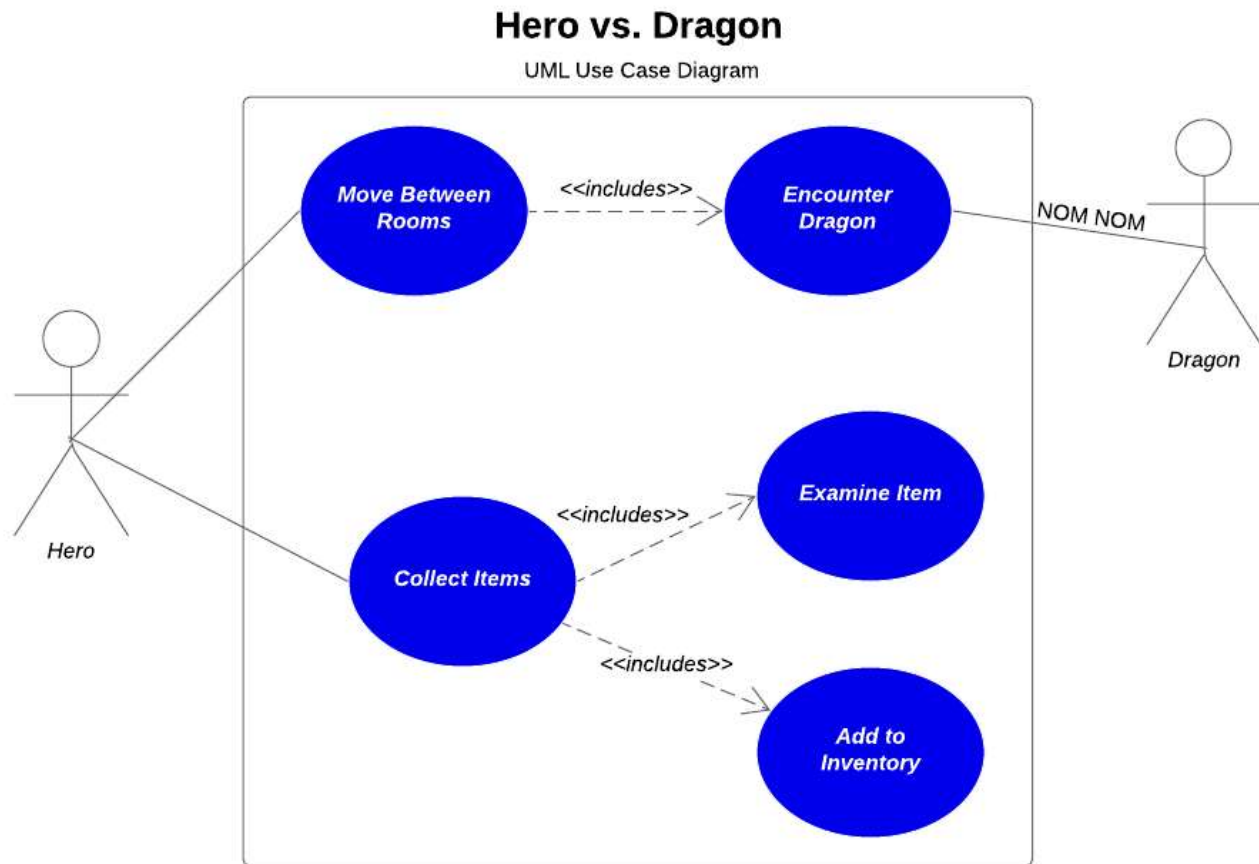*Meddle not in the affairs of dragons, for thou art crunchy and good with ketchup.*

—Laurie E. Rozakis, The Complete Idiot's Guide to Grammar and Style

Required Resources

Reading: UML - Behavioral Diagram vs. Structural Diagram (https://www.visual-paradigm.com/guide/uml-unified-modeling-language/behavior-vs-structural-diagram/)
This reading will provide you with a high-level overview of the two categories of UML diagrams:

behavioral and structural. In this course, you will learn about UML class, use case, activity, and sequence diagrams in more detail.

Reading: Lucidchart Tutorial (/d2l/lor/viewer/viewFile.d2lfile/1918255/24209,-1/)
This tutorial will walk you through using the CASE tool Lucidchart. You will learn how to create a Lucidchart account and how to create different types of documents and diagrams.

Readings: UML Diagram Tutorials
This tutorial from Lucidchart walks you through elements of different UML diagrams, including their benefits, when to apply them, their components, and their notation. It also provides you with some example diagrams and some tips on how to make these UML diagrams with Lucidchart. You will be asked to create each of these different UML diagrams in Project Two, so be sure to read through each link to understand the distinctions between the diagrams.

- UML Class Diagram Tutorial (https://www.lucidchart.com/pages/uml-class-diagram)
- UML Use Case Diagram Tutorial (https://www.lucidchart.com/pages/uml-use-case-diagram)
- UML Activity Diagram Tutorial (https://www.lucidchart.com/pages/uml-activity-diagram)
- UML Sequence Diagram Tutorial (https://www.lucidchart.com/pages/uml-sequence-diagram)

Video: UML Class Diagram Tutorial (https://www.youtube.com/watch?v=UI6lqHOVHic) (10:16)
This video tutorial from Lucidchart shows how UML class diagrams are used to describe the structure of a system by showing the system's classes and how they relate to one another. Consider the following questions as you watch:

- What are the characteristics of a class diagram?
- What are the possible types of relationships between classes?

Video: UML Use Case Diagram Tutorial (https://www.youtube.com/watch?v=zid-MVo7M-E) (13:23)
This video tutorial from Lucidchart shows how UML use case diagrams depict a high-level overview of the relationship between use cases, actors, and the actors' interactions with the system. Consider the following questions as you watch:

- How are the system/user interactions illustrated in a use case diagram?
- How does the use case diagram specify the context and requirements of a system?
- How is the basic flow of events modeled in the use case diagram?

Video: How to Make a UML Sequence Diagram (https://www.youtube.com/watch?v=pCK6prSq8aw) (8:37)
This video tutorial from Lucidchart walks you step-by-step through the process of making a UML sequence diagram. Consider the following questions as you watch:

- What is the difference between an actor and an object?
- When should you use an alternative frame?

Reading: Thinking Through Technical Requirements
(course_documents/CS%20255%20Thinking%20Through%20Technical%20Requirements.pdf?
ou=1918255)
This reading will explain what technical requirements are and how you determine the technical
requirements for a system. You will be shown an example of technical requirements for an ATM
system. This reading will help support your work in determining the technical requirements of your
system design for Project Two.

Additional Support (Optional)

Reading: UML Sequence Diagrams Made Easy (https://www.lucidchart.com/blog/lucidchart-uml-
sequence-diagram-markup)
This optional reading describes a quick and easy way to make UML sequence diagrams using a
language called markup. If you already know how to use markup, you can make your UML sequence
diagram more quickly. Be sure to double-check your UML sequence diagram at the end of the process
to ensure it captures all required elements and uses proper notation.