**Familiarity Review Template**

**Name:** Jared Herbert

**Date:** 2/2/2019

**Week:** 3

**Coding Topic:** State Diagrams

**Description of Understanding:** A state diagram is a visual depiction of the different behaviors of a system. It is commonly used in computer science but can be used on other fields. The system in the diagram is made of multiple objects. the objects and actions are often set to a finite exact amount of occurrences. The occurrences do not have to be exact but it makes it easier project.

**Teaching Video:** https://github.com/JaredHerbert/CIT-360/blob/master/Recording%20%2313.mp4

**Starting at:** 0:00

**Also Integrated with:** n/a

|  |  |  |  |
| --- | --- | --- | --- |
| **File** | **Git Link** | **What should I be looking for?** | **Sandbox or Your code?** |
|  | https://github.com/JaredHerbert/CIT-360/blob/master/2019-01-29%2017\_51\_51-Mozilla%20Firefox.png | A state diagram  Of a door | **Sandbox** |
|  | https://github.com/JaredHerbert/CIT-360/blob/master/diagam.png | A state diagram | **Sandbox** |
|  | https://github.com/JaredHerbert/CIT-360/blob/master/state%20diagram.pptx | Click View Raw  To see power point slids | **I made this** |
|  |  |  |  |

**Coding Topic:** use-case-diagrams

**Description of Understanding:**

A use case diagram is a picture used to explain a complex product. In it you may find:

**System**: the product commonly represented by a rectangle

**Actors**: the user type or category there a 2 kinds of actors primary (who initiates) on the left and secondary (who reacts)on the right

**use case**: commonly an action represented by a cycle in the rectangle

**relationship:** the interaction between actors and use cases.

the 4 main types of relationships are

**association**,

**include** (connects a base use to a include case using a dotted line),

**extend** (connects to base use case with a dotted line and an arrow at the abase case but not all the time),

**generalization** (multiple options with unique quality’s).

**Teaching Video:**  n/a

**Starting at:** n/a

**Also Integrated with:** n/a

|  |  |  |  |
| --- | --- | --- | --- |
| **File** | **Git Link** | **What should I be looking for?** | **Sandbox or Your code?** |
|  | https://github.com/JaredHerbert/CIT-360/blob/master/use%20case.png | A use case diagram example | **Sandbox** |
|  |  |  |  |

**Coding Topic:** sequence-diagrams

**Description of Understanding:**

sequence diagram - type of diagram shows how objects interact with

each other and the sequence that happens. The fallowing are some key parts of a sequence diagram

objects - rectangles

actor - stick figure out side of the object

life lines - vertical lines that show the passage of time

message - information transfer between actors and objects (solid line)

return message - information from object to origin to message (dotted line)

Frame - a box surrounding an interaction

activation box - shows when objects are idle or active

**Teaching Video:**  n/a

**Starting at:** n/a

**Also Integrated with:** n/a

|  |  |  |  |
| --- | --- | --- | --- |
| **File** | **Git Link** | **What should I be looking for?** | **Sandbox or Your code?** |
|  | https://github.com/JaredHerbert/CIT-360/blob/master/15-combined-fragment-example.png | A sequence diagram example | **Sandbox** |
|  |  |  |  |

**Coding Topic:** Use Case Documents

**Description of Understanding:**

Use Case Documents are documents that explain the purpose function or reason of a system to another person or group. The focus is about what a product is and less about how it is done. Example: base ball is a game you play with a ball and designated points called basses. Common elements in a use case document are:

**Name:** what is the action that user is taking

**brief description: quick explanation of how it starts and where it ends**

**actors:** who are the users

**Preconditions:** what must be true before the use case starts

**basic flow: actions performed by the user and response by the system.**

**alternate flows and exception flows: variant paths.**

**Post-conditions:** what are true after the use case is over.

Theas are not all the possible elements but just a basic few I have seen reoccur many examples I have found.

**Teaching Video:**

**Starting at:**

**Also Integrated with:**

|  |  |  |  |
| --- | --- | --- | --- |
| **File** | **Git Link** | **What should I be looking for?** | **Sandbox or Your code?** |
|  | https://github.com/JaredHerbert/CIT-360/blob/master/use%20case%20examples.docx | Click View Raw  To see word doc. | **Sandbox** |
|  |  |  |  |