Mark	/50

[Instructions: Remove everything that is not a heading below and fill in with your own diagrams, etc.]

### 1. Brief introduction \_\_/3

The feature I am responsible for includes the level design of the dungeon platform levels. This will include the aspects of platform sidescrolling, enemy placement, obstacles and hazards to the player character, and how the player will traverse these levels.

## 2. Use case diagram with scenario \_14

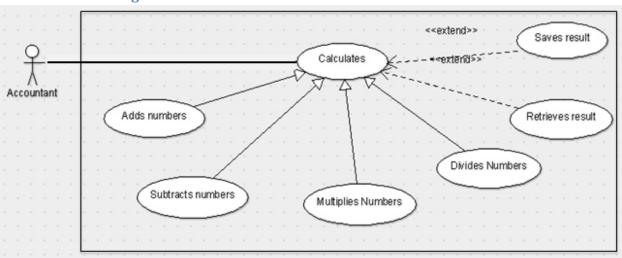
[Use the lecture notes in class.

Ensure you have at least one exception case, and that the <<extend>> matches up with the Exceptions in your scenario, and the Exception step matches your Basic Sequence step.

Also include an <<include>> that is a suitable candidate for dynamic binding]

#### Example:

**Use Case Diagrams** 



#### **Scenarios**

[You will need a scenario for each use case]

Name: Add Numbers

**Summary:** The accountant uses the machine to calculate the sum of two numbers.

Actors: Accountant.

Preconditions: Calculator has been initialized.

**Basic sequence:** 

Step 1: Accept input of first number.

**Step 2:** Continue to accept numbers until [calculate] is entered.

Step 3: Accept calculate command.

**Step 4:** Calculate and show result.

#### **Exceptions:**

Step 1: [calculate] is pressed before any input: Display 0.

**Step 2:** A button other than [calculate] or a number input is pressed: ignore input.

Post conditions: Calculated value is displayed.

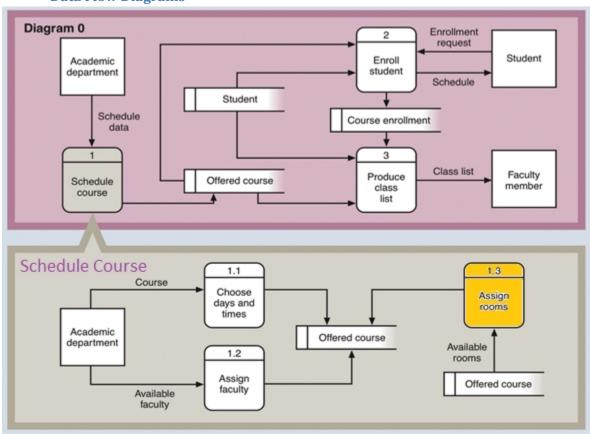
Priority: 2\* ID: C01

# 3. Data Flow diagram(s) from Level 0 to process description for your feature \_\_\_\_\_14

[Get the Level 0 from your team. Highlight the path to your feature]

Example:

**Data Flow Diagrams** 



#### **Process Descriptions**

Assign rooms\*:

WHILE teacher in two places at once OR two classes in the same room

<sup>\*</sup>The priorities are 1 = must have, 2 = essential, 3 = nice to have.

#### Randomly redistribute classes

#### **END WHILE**

\*Notes: Yours should be much longer. You could use a decision tree or decision table instead if it is more appropriate.

## 4. Acceptance Tests \_\_\_\_\_9

[Describe the inputs and outputs of the tests you will run. Ensure you cover all the boundary cases.]

#### **Example for random number generator feature**

Run feature 1000 times sending output to a file.

The output file will have the following characteristics:

Max number: 9Min number: 0

- Each digit between 0 and 9 appears at least 50 times
- No digit between 0 and 9 appears more than 300 times
- Consider each set of 10 consecutive outputs as a substring of the entire output. No substring may appear more than 3 times.

#### **Example for divide feature**

Output	Numerator	Denominator	Notes
	(int)	(int)	
0.5	1	2	
0.5	2	3	We only have 1 bit precision for outputs. Round all values to the nearest .5
0.0	1	4	At the 0.25 mark always round to the nearest whole integer
1.0	3	4	At the 0.75 mark always round to the nearest whole integer
255.5	5	0	On divide by 0, do not flag an error. Simply return our MAX_VAL which is 255.5.

# 5. Timeline \_\_\_\_\_/10

[Figure out the tasks required to complete your feature]

#### Example:

#### **Work items**

Task	Duration (PWks)	Predecessor Task(s)
1. Requirements Collection	5	-

2. Screen Design	6	1
3. Report Design	6	1
4. Database Construction	2	2, 3
5. User Documentation	6	4
6. Programming	5	4
7. Testing	3	6
8. Installation	1	5, 7

# Pert diagram

