

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

1. Brief introduction __/3

I am in charge of the level design. My job is to make the world the game takes place in and design an enriching environment.

2. Use case diagram with scenario __14

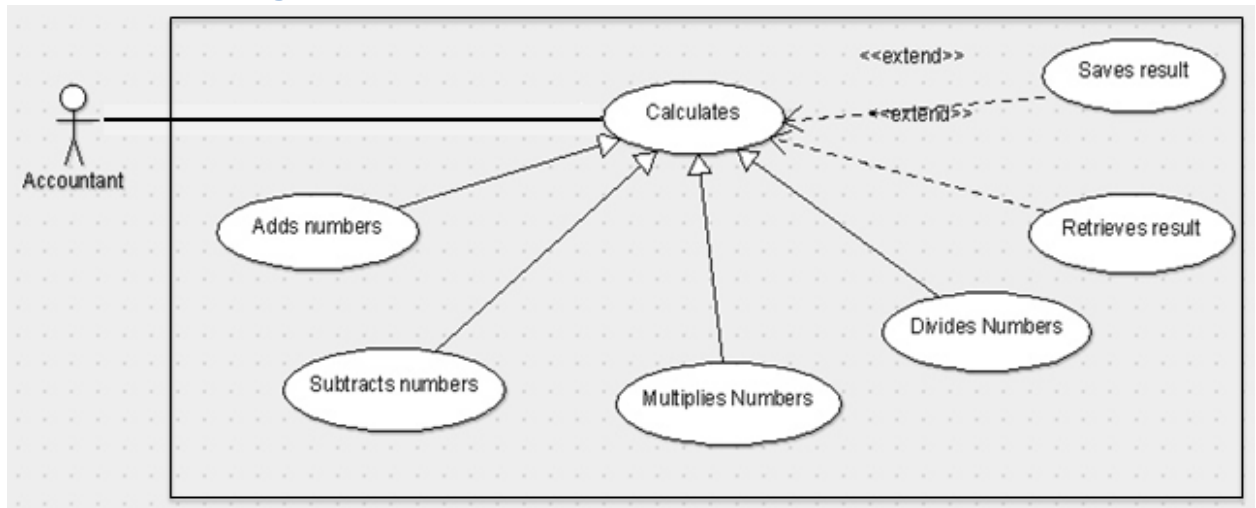
[Use the lecture notes in class.

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*

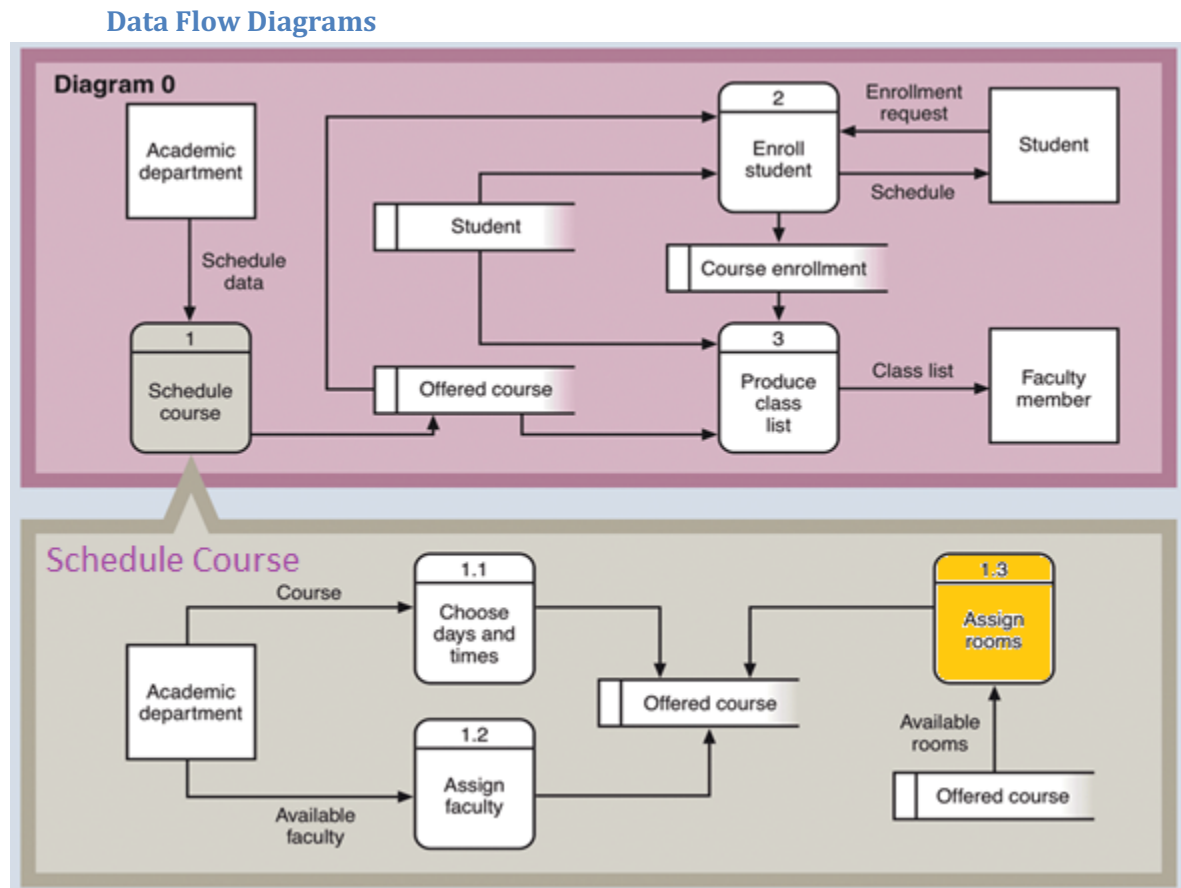
ID: C01

*The priorities are 1 = must have, 2 = essential, 3 = nice to have.

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:



Process Descriptions

Assign rooms*:

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

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: 9
- Min 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 (int) | Denominator (int) | Notes |
|--------|-----------------|-------------------|---|
| 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]

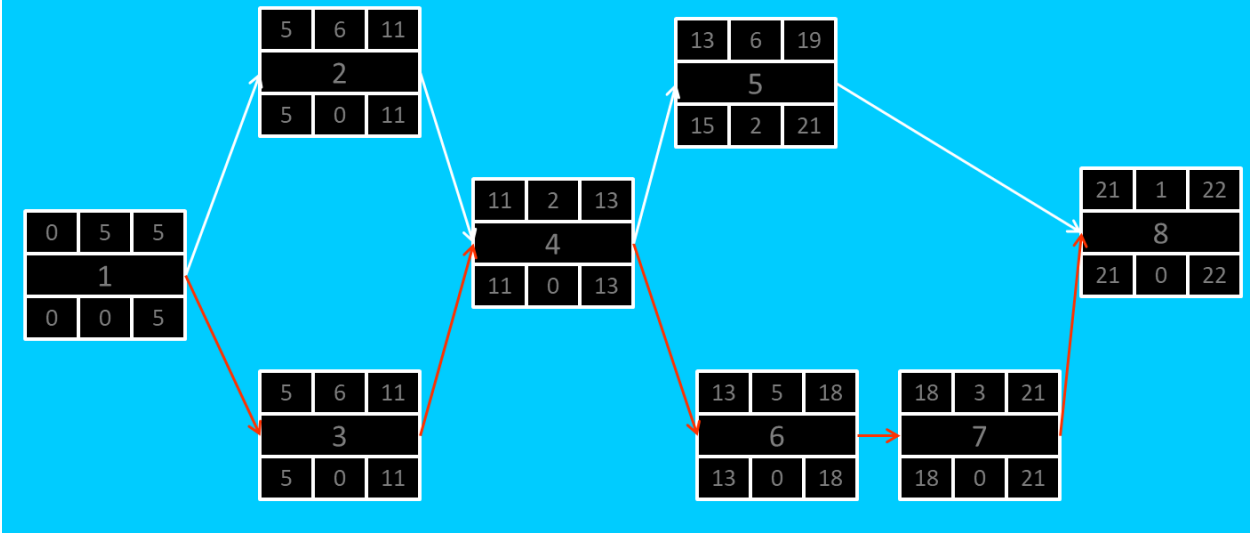
Example:

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



Gantt timeline

