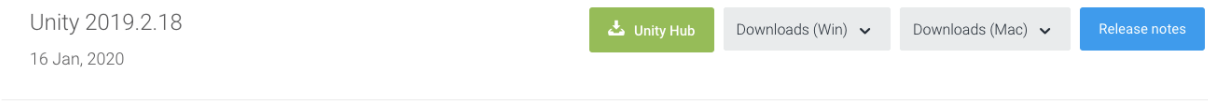
Trajectory
Developer's Manuel

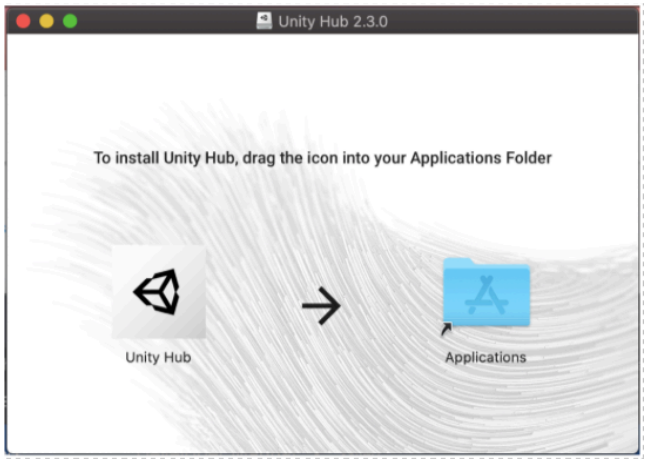
- **Environment Setup**

  Unity version 2019.2.18: https://unity3d.com/get-unity/download/archive

1. Go to the link listed above, and go to 2019.2.18 version of Unity, click download either Mac or Window according to the operating system you on.

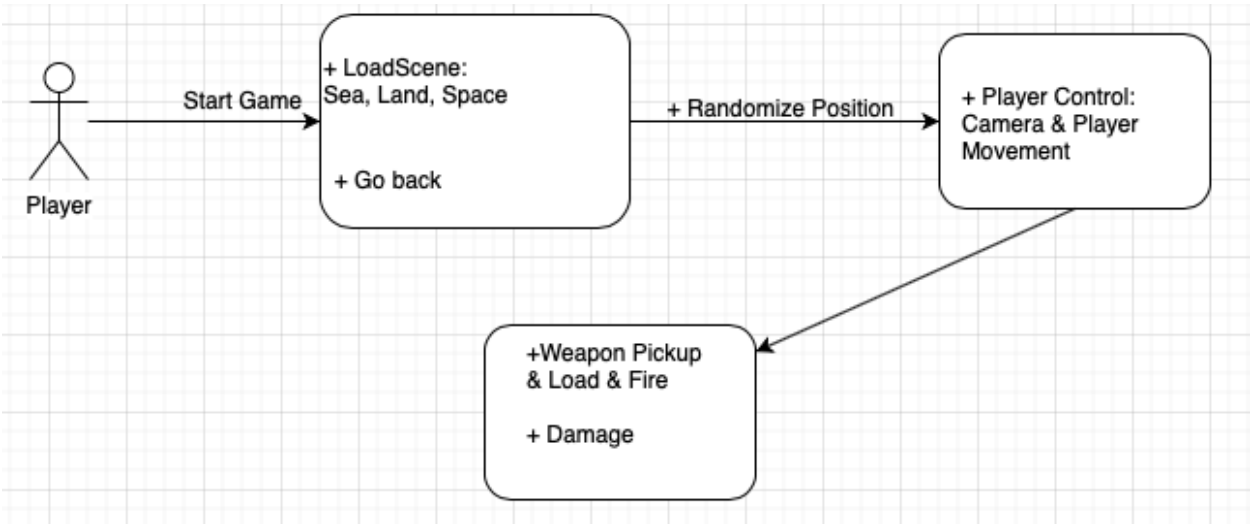


2. Read and agree/disagree with the terms of Unity.
3. If you're on Mac, click and drag Unity icon to download.

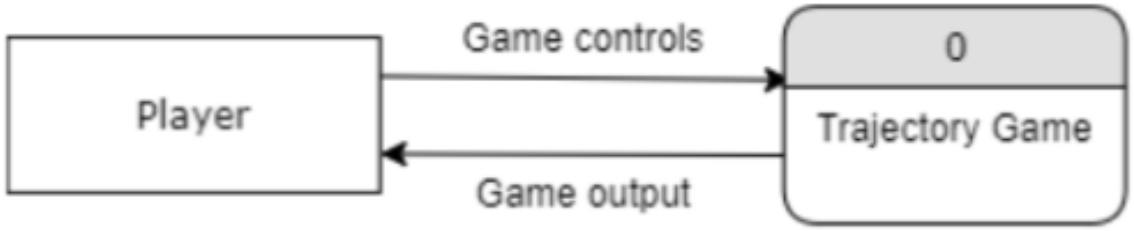


   For Window, click install and follow the prompts.
4. Wait for the installation and you're set!

- **High Level of Existing Code**

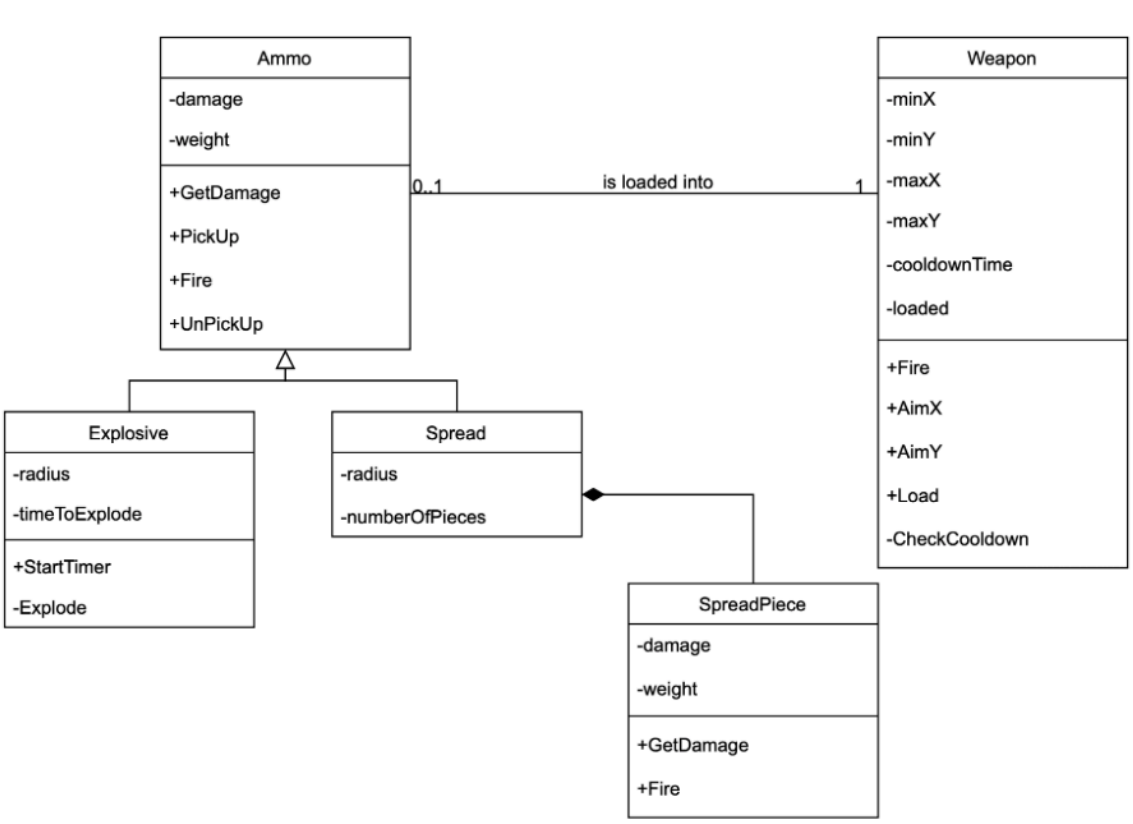


Context Diagram:

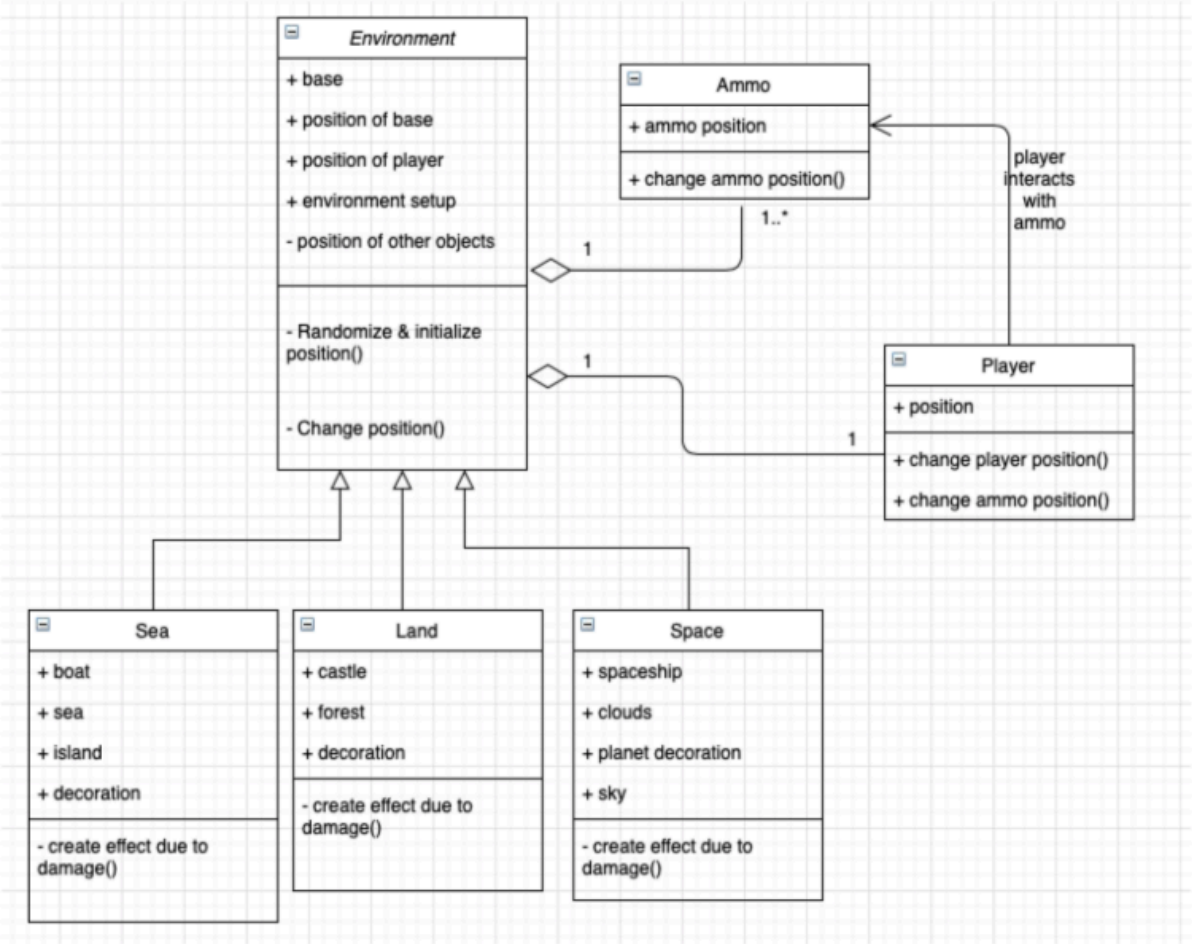


Class Diagram:

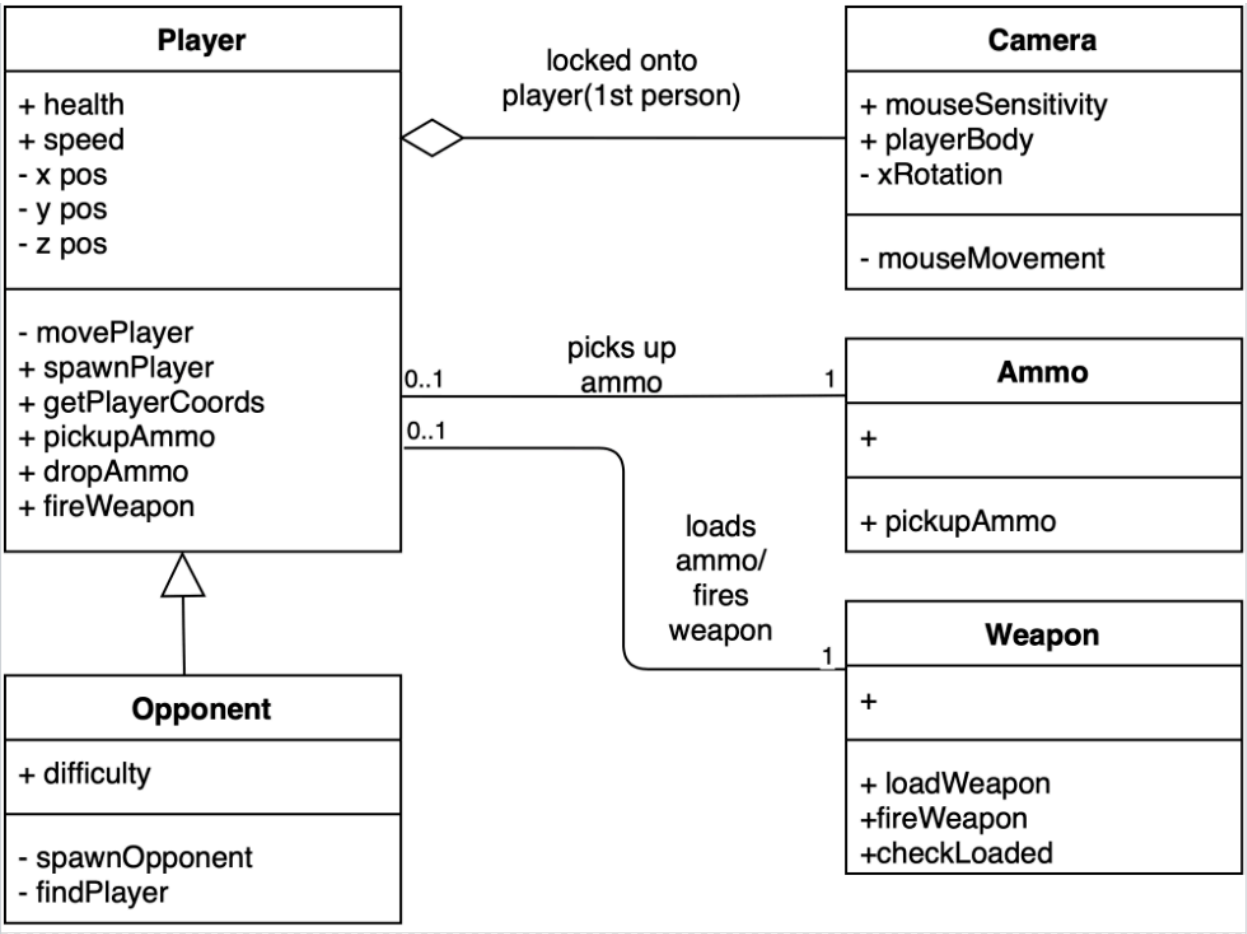
Lucas Thomas



Yingruo Liu


Environment
+ base
+ position of base
+ position of player
+ environment setup
- position of other objects
- Randomize & initialize position()
- Change position()
Ammo
+ ammo position
+ change ammo position()
player interacts with ammo
1..*
1
1
1
Player
+ position
+ change player position()
+ change ammo position()
Sea
+ boat
+ sea
+ island
+ decoration
- create effect due to damage()
Land
+ castle
+ forest
+ decoration
- create effect due to damage()
Space
+ spaceship
+ clouds
+ planet decoration
+ sky
- create effect due to damage()

Noah Mammen



Blake Rude

To be added

As for the Oral Exam:

Important dates: April 21st & April 23rd

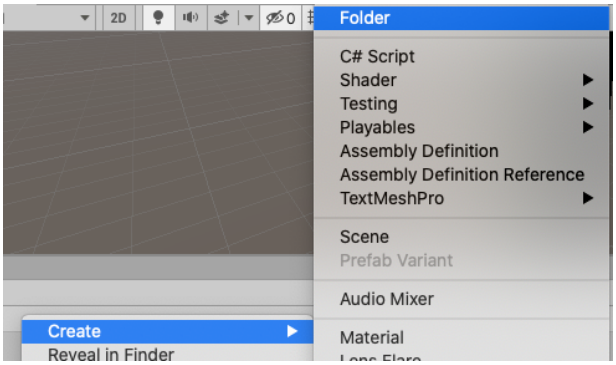
- **Prefab Creation**

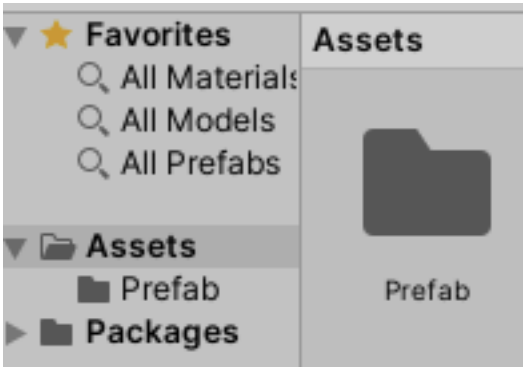
  Dr.Bc's Guidelines:

1. Create a "dummy" version of the thing you want to make into a prefab in your scene.
2. Select Asset > Create Prefab
3. Then drag the "dummy" object you created into the "empty" prefab asset that you just created

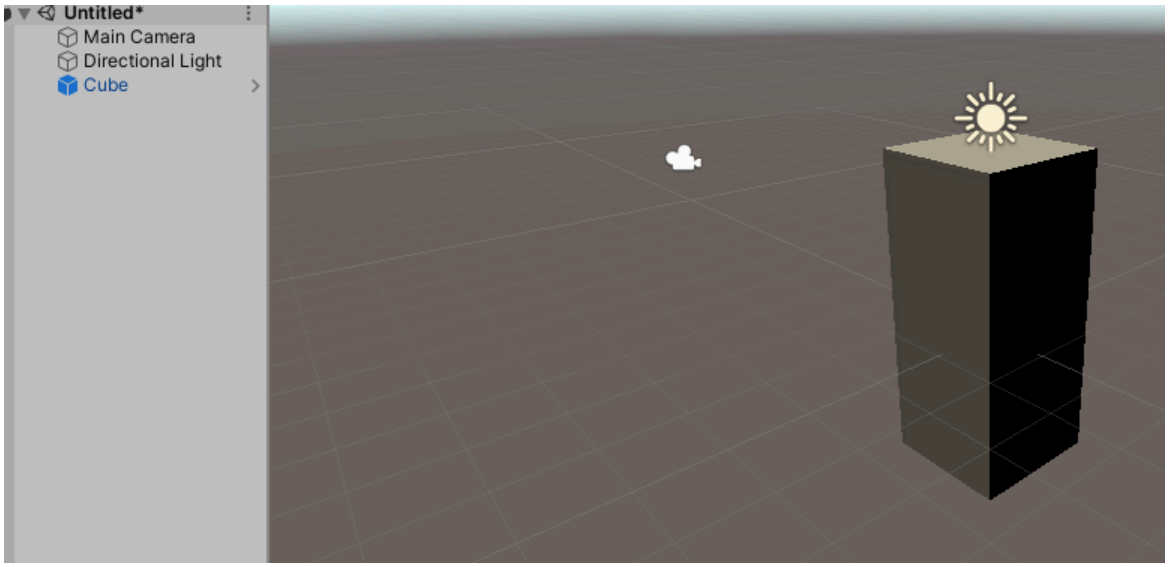
Prefabs in Detail:

1. Create a prefab folder in Assets of your project

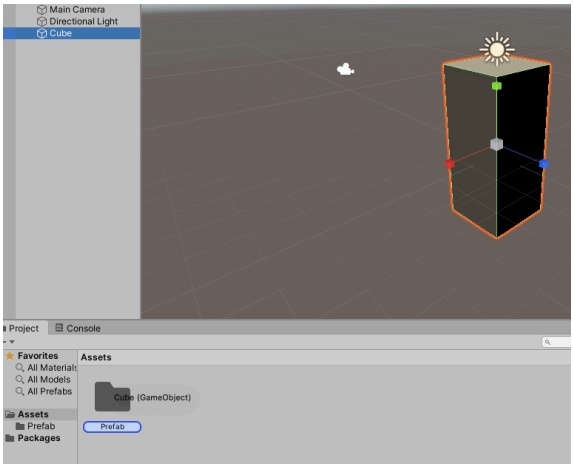




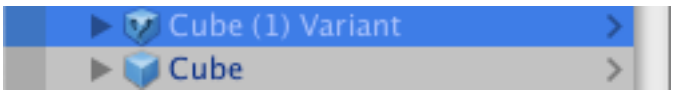
2. Create an object you'd like to use as a prefab for the project:
   As an example, I have created a random cube below.



3. Select, click and drag the object into the folder:

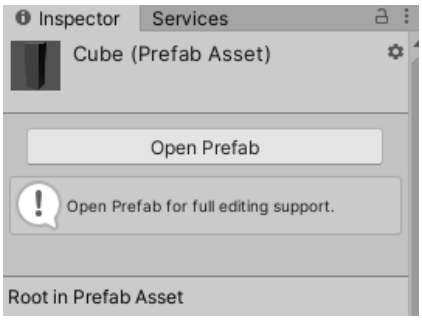


4. In our version of Unity, it'll ask you if you would like to create an original prefab or a variant prefab. The major difference is that a prefab variant is in connection with the original prefab, and it is a variant of the original prefab. For example, if you have created a group of same trees except their color and you'd like to apply a change of color in only a certain number of trees, this is the case you would create a prefab variant.

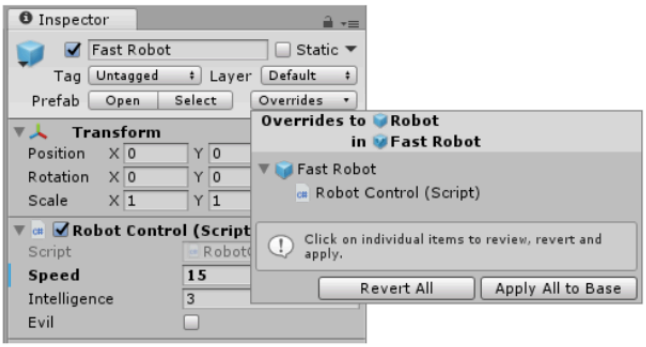


Note that the icons for different prefabs are slightly different.

5. In the inspector area, you can see that the prefab is created, and you can open it to make changes to it as you like.



6. After you have created a prefab variant and made changes to it, then you can see the “apply changes” option in the inspector bar, as is shown in the screenshot below. By selecting “apply,” you will only apply the changes to the instances of the prefab variant. As for the original prefab, the changes will be applied to all the instances of the prefab variants in connection with the original prefab and the instances of the original prefab itself.



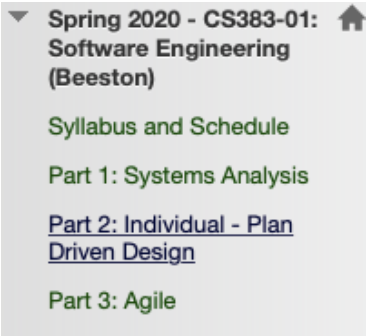
7. Now if you’d like to apply that prefabricated object into any scene, you can simply drag that object from your prefab folder into the scene.

PS: As for the oral exam, you need to be prepared with at least one prefab and demonstrate its use. Also, be prepared with a well-written documentation.

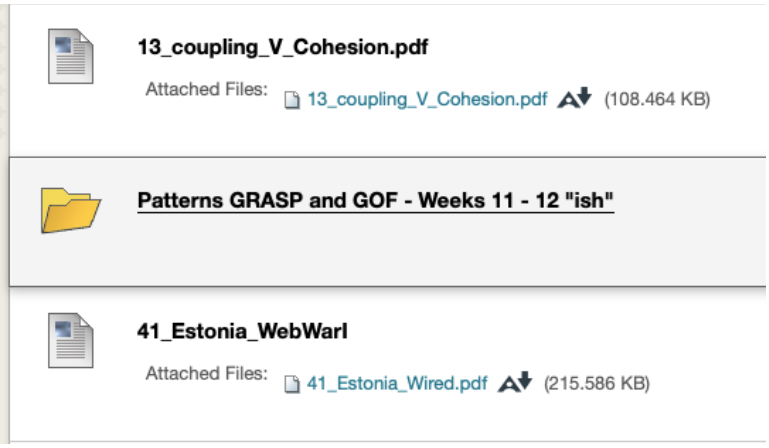
Additional resources for prefab models: https://assetstore.unity.com/

• Patterns:

1. Go onto CS383 bbelarn page Part2.

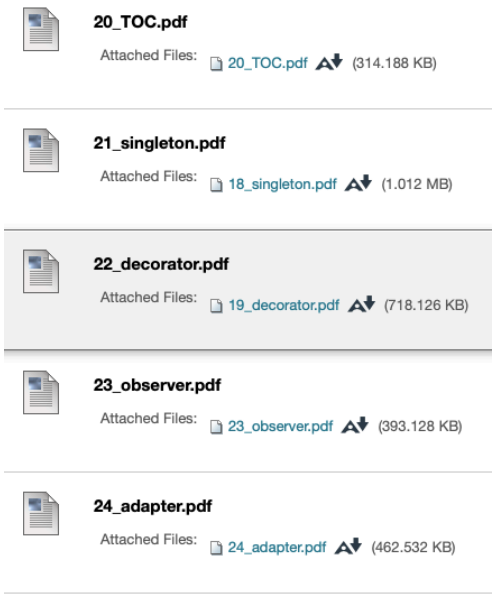


2. Find and select the yellow folder named “Patterns GRASP and GOF”



3. Click on the Patterns link to read the overall introductions and descriptions over patterns. The link is https://sourcemaking.com/design_patterns.
Or click on bbelarn icon:

4. The detailed descriptions about each pattern lies within the following folders



• How to Choose a Pattern for Your Project

Will be added after it's covered in lecture

• Test Plan

Be prepared to demonstrate your complete test plan and explain what they are, why they are important, what it means if it fails.

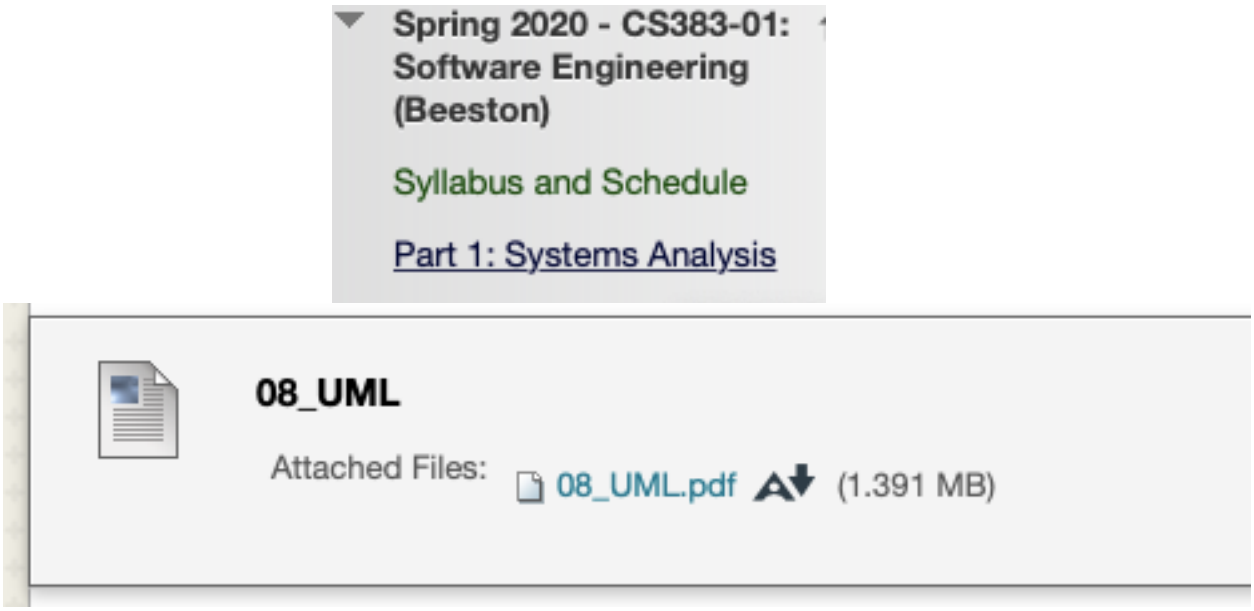
• Code Reuse

Be prepared to show DR.BC an example of reuse in your code, explain what you did to integrate it with the code you wrote, understand how it's licensed and know what the legal implications are if you market your code with the reused portion.

Resources to study for to be added

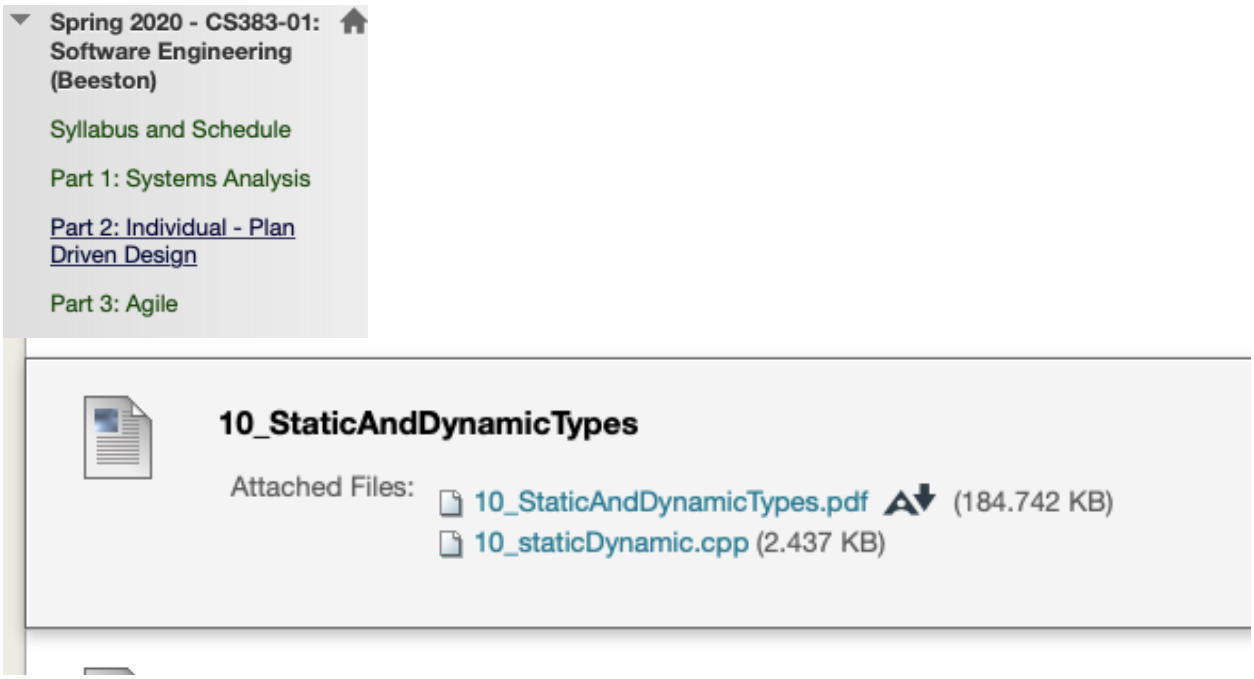
• Class Diagram & Sequence Diagram

On bblearn, select 8 UML on Part1. And you can find the slides to study for class diagrams.



- **Static and Dynamic Binding**

Go to bblearn 10_StaticAndDynamicTypes from Part2 to study for the exam.



- **Contribution & Gantt**

You need to be prepared to describe briefly what your code does, run your game and point out where your code is called and run.

Be familiar with your Gantt chart and your estimation and actual hours of work and what you've learnt from this.

- **Side Note**

Document your project well and be familiar with which question every part of your documentation associates with and who to go to for help.

Good Luck!