CS308 Building Software Systems 2016-17 Gizmoball Preliminary Design

Group: MW1

Use Cases **3.5 / 5**

Good coverage of the set of uses cases but many are quite poorly presented. Should keep these as short and sharp as possible - precise and concise.
Don't repeat the Trigger in the basic Course of Events. E.g. Load, Move, Rotate.
You had 2 Load games.
Connect starts talking of Delete Mode.
Add Ball should set ball speed.
Absorber precondition must be in Build Mode.
Reload precondition requires previous game to load.
Play mode doesn't "spawn ball" – ball must be explicitly added.
Load Game precondition – valid game must exist – how can that be checked?

Class Diagram **5 / 6**

Class diagram blew my mind … very difficult to trace and understand the detail. How did you manage to create such a complex diagram?
It does appear to have most of the key classes in there. As far as I could track most of the associations look sound too.
Good that you have Load and Save and connections.
Don't have disconnected classes. Almost all classes should have ingoing associations – if not who is using them – Save.
Watch overuse of interfaces – I know that you were required to use them in Semester 1 and you should use them here too but only if there is a reason to do so e.g. different possible implementations.
Maybe better to separate into 3 diagrams – Model View Controller – and then explain the connections between them.

Screenshots **2 / 3**

Basics of screenshots sound and explanation appreciated. However pretty boring and also should have shown some example Gizmos in both modes.

Physics Loop **3 / 4**

Good understanding and explanation of the Physics Loop. However, a few issues: collision detection is done before the ball moves – reverse steps 2 and 3. Need to know if there is going to be a collision prior to ball move. Flippers also need to move within the loop – for the same time as the ball is moving. Friction and Gravity are applied for the same time as the ball moved. Key Triggering needs to be handled as well e.g. it may start flippers moving.

Thorough, good description of Triggering just missed out how these Key to Gizmo and Gizmo to Gizmo associations are going to be physically represented in your design.

Project Plan and Specification Issues **1.5 / 2**

Revised spec a bit focussed on high-level issues but missing key important detail / challenge e.g. board size / L, gravity, friction, ball speed range …

Plan okay … well presented as Gantt chart. Main implementation MVC doesn't really start until after Prototypes. Good coverage and separation of tasks.

Total: 15 / 20 **Final Mark: 7.5 / 10**

MIWFeb2017