

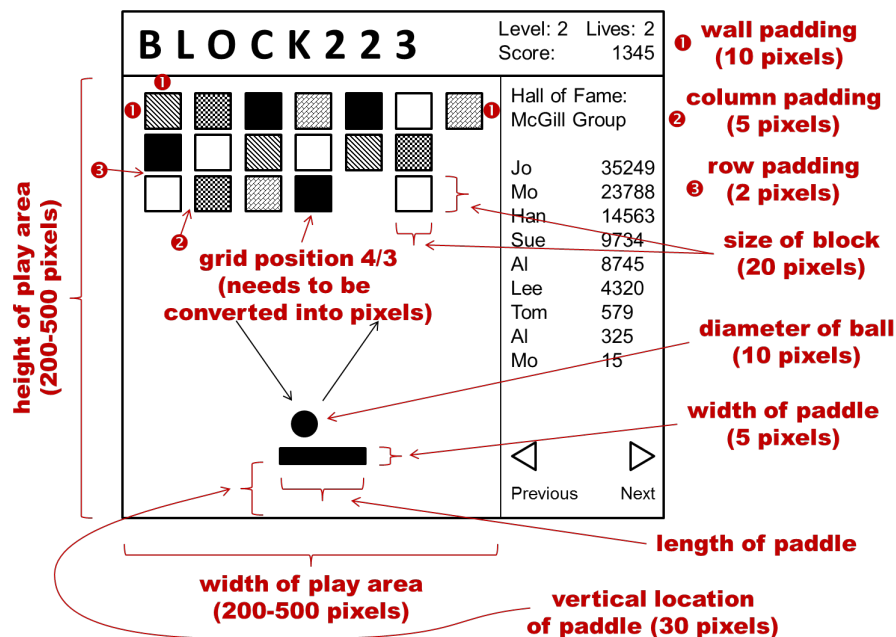
Deliverables for Iteration 2 – UI Mock-up, Controller Interfaces, Sequence Diagrams (5%)

The deliverables for Iteration 2 are (a) UI mock-ups, (b) the specification of the Controller interface, and (c) sequence diagrams for each listed feature of the **Block223** application. You are also required to **state who worked on which features**. The deliverables are due on **Friday, February 15, 2019, at 23:30**.

See the Project Overview document for a general description of the **Block223** application, an overview of all deliverables, technical constraints, and general rules regarding project reports, submission of source code, and member contributions.

1 Features Required for Iterations 2 and 3

1. Add a game
2. Define game settings (e.g., number of levels, minimum speed, speed increase factor...)
3. Delete a game
4. Update a game
5. Add a block to the game so that it can be used in a level
6. Delete a block from a game so that it cannot be used anymore in any level
7. Update a block in a game
8. Position a block at a grid location in a level



9. Move a block from one grid location to another grid location in a level
10. Remove a block from a level
11. Save game

The "Save game" feature must be implemented with the help of Java Object Streams and the Java Serializable interface as explained in "Tutorial 07 – Persistence and Additional Features". A game is not saved automatically but only upon request from the admin.

12. Log in/out as a player or admin

Assign the development of these **Block223** features to your team members, i.e., each team member is **individually responsible for two features**. If there are fewer than six team members in your team, the remaining features have to be implemented by the whole team. Each team member will be graded **individually based on the quality of the UI mock-ups, controller interface, and sequence diagrams for the assigned features**.

As a team, make sure that the project report has a **uniform look and formatting**.

2 UI Mock-ups

As a team, create a UI mock-up for all twelve features. Each team member is responsible for her/his assigned features but the features need to be **integrated into a common UI**. As a team, ensure that the **look and feel of the application is uniform across all features**. You may choose your favorite drawing tool for the UI mock-up or a UI prototyping tool such as Pencil (<https://pencil.evolus.vn/>) and then **import the mock-up into your report**. You may also draw the UI mock-up by hand, scan it (or take a photo), and include it in your report as long as the mock-up is clearly legible.

3 Specification of Controller Interface

Individually specify the **Controller interface for your assigned features**. The interface consists of the **full method declaration** excluding the method body of all Controller methods relevant for your assigned features (see “Tutorial 04 – Sequence Diagrams and Controllers, JUnit” for examples of the required interface specification). In addition to all **modifier methods**, do not forget to include all **query methods** required for the features. The same query method may be used for several features. As a team, **ensure the consistent use of query methods across features**.

4 Sequence Diagrams

Individually define a **sequence diagram for each Controller method relevant for your assigned features** (for both **modifier and query methods**). Make sure to use the API of the code generated from the Umple domain model in your Controller methods. Note that a common Umple domain model will be provided within the next few days. Each team is required to use the **common Umple domain model** to ensure compatibility for later deliverables.

You may use **draw.io or the JetUML tool or any other UML tool**. You may also draw a sequence diagram by hand, scan it (or take a photo), and include it in your report as long as the sequence diagram is clearly legible.

Submission

Your team is required to hand **in a single project report** in myCourses. The project report has **13 sections in total** – one section for the UI mockup and then **one section for each required feature in the order listed in section 1 of this document**. Each section of a feature includes the specification of the Controller interface required for the feature and its sequence diagrams. The project report must clearly **state in the header of a section which feature has been assigned to which team member**.

Marking Scheme

<i>Deliverables for Iteration 2 of Project</i>	<i>Marks</i>
UI Mock-ups of features (individual mark)	20
Uniform look and feel of the application (team mark)	10
Specification of Controller interface for features (individual mark)	10
Sequence diagrams for Controller methods of features (individual mark)	50
Uniform look and formatting of the project report (team mark)	5
Specification of who worked on which feature in section headers (team m.)	5
Total Marks:	100
The total mark may be adjusted based on the actual contributions of a team member to the deliverables.	