

Meeting 1  
Date: 15.11.2019  
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JAVA Game development framework:

- <https://libgdx.badlogicgames.com/>

Requirements:

### General mandatory functional Requirements to the games

1. Authentication using an username and a password, via a database.
2. The score of each play should be recorded in a database.
3. At the end of each play, the user should be able to enter his/her name together with the recorded score.
4. At the end of each play, the game should show the top 5 scores that have ever been recorded.

And some mandatory non-functional requirements;

5. Use SQL and JDBC driver
6. Use prepared statements in Java to avoid code-injection vulnerabilities

A database you can get a free MySQL database via

<https://projects.ewi.tudelft.nl>

or you can also use a SQLite database. In case you strongly prefer another database type

### Bubble spinner:

Functional requirements:

#### **Must-haves:**

1. shooting (randomized) ball (must-have)
2. first makes the collision of the balls work (must-have)
  - a. no ball disappear
  - b. ball disappear → score up
2. timer (must-have)
3. score (must-have)
4. win (must-have)
5. losing (must-have): one ball hits the edges
6. a database with username and password (+)

7. rotation of the arrow following the control of the mouse
8. At the end of each play, the game should show the top 5 scores that have ever been recorded
9. then make the graph spinning properly (must-have)
10. randomize the first graph of balls and the color of the shooting balls (must-have)

#### GUI:

1. Separate pages for login gui (+ must have), start page(+), leaderboard(+), games(+), sign-ups(+).

#### Should-haves:

1. GUI: game rules
2. Five different colors of balls
3. Difficulty game levels: different number of ball colors
4. Different scoring systems: e.g. 100 points for 5 balls once and 50 points for 3 balls once.
5. Simple achievement system: e.g. play 5 difficulty level in one role

#### Can-haves:

1. Add friends and comparison scores between friends
2. User's levels based on their score
3. More complex achievement system

#### Non-functional requirements:

1. Java
2. SQL
3. libgdx is JAVA Game development