# **Assignment 3**

CS2212 – Introduction to Software Engineering

Group 2

Kevin Brightwell

Jonathan Demelo

Graem Littleton

Justin McDonald

Ramesh Raj

Professor Laura Ried
TA Mike Tighe
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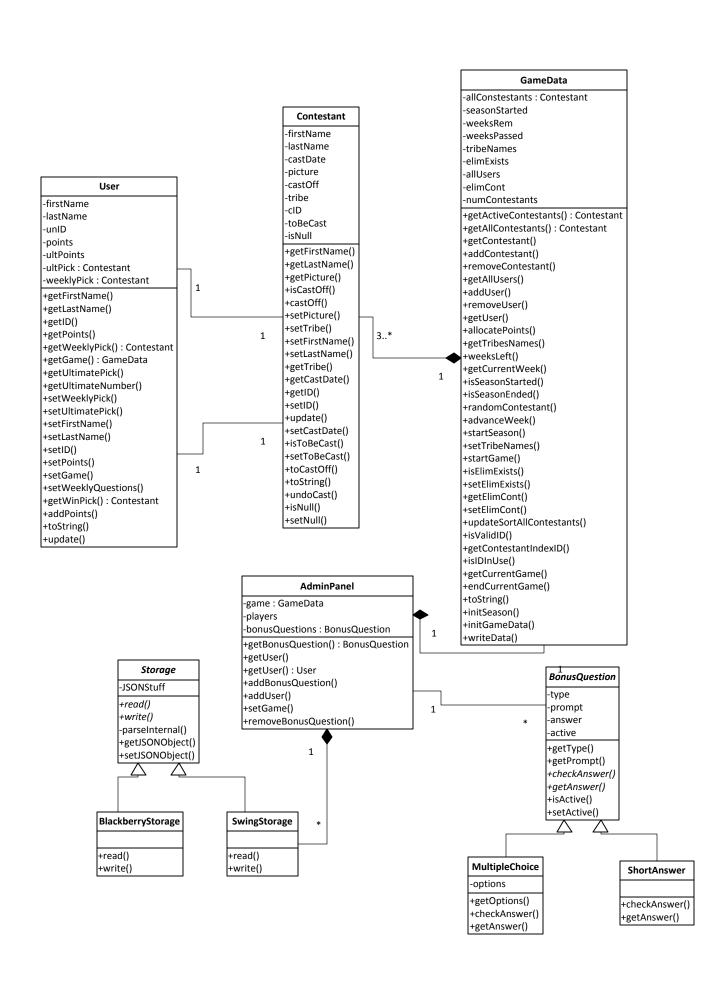
• UML Class Diagram

# Section 2:

- Testing
  - Test case listing
  - Driver and stub examples

# Section 3:

• Project Plan (Gantt Chart)



**TESTING**: Admin User creating a season with no tribe names

**REFERENCES**: Requirement 4.c.1.2

**TEST CASE:** 

- 1. At unix command prompt, run admin. Main Frame
- 2. At opening screen, do not enter tribe names
- 3. Click "create season" at the bottom of the panel

#### **EXPECTED OUTPUT**

Error --> Message: Invalid tribe names

**ID**: 2

**TESTING**: Admin User creating a season with invalid (too long) tribe names

**REFERENCES**: Requirement 4.c.1.2

**TEST CASE:** 

1. While on the Create Season panel

- 2. Enter any string of characters with a length > 30 in one tribe name
- 3. Enter "abcde" in the second tribe panel

**EXPECTED OUTPUT**:

Error --> Message: *Invalid tribe name* 

**ID**: 3

**TESTING:** Admin User creating a season with special characters in tribe names

**REFERENCES**: Requirement 4.c.1.2

**TEST CASE:** 

- 1. While on the create season panel
- 2. Enter "wxyz123" as one of the tribe names
- 3. Enter "abcde" as the second tribe name

#### **EXPECTED OUTPUT**:

Error --> Message: *Invalid tribe name* 

**TESTING**: Admin User creating new season

**REFERENCES**: Requirement 4.c.1.1

**TEST CASE:** 

- 1. On the Create Season panel
- 2. Enter "wxyz" as the first tribe name
- 3. Enter "abcde" as the second tribe name

#### **EXPECTED OUTPUT**

Successful season create ----> Panel should switch to general panel

**ID**: 5

**TESTING:** Admin User changing themes of the GUI

**REFERENCES**: Requirement 4.c.1.1

**TEST CASE**:

1. On any panel, select "Theme" from the taskbar

2. Select any of the themes (default should be "Snow")

#### **EXPECTED OUTPUT**

Background/buttons should successfully change to chosen theme

**ID**: 6

**TESTING:** Admin User saving a new contestant with invalid id

**REFERENCES**: Requirement 4.c.1.2

**TEST CASE**:

1. Enter the contestant panel

- 2. Enter "wxyz" into the first name field, and "abcde" in the last name field
- 3. Enter "abcde" for user id and press "save"

#### **EXPECTED OUTPUT**

Error --> Message: *Invalid user id* 

**TESTING**: Admin User saving a new contestant with invalid name

**REFERENCES**: Requirement 4.c.1.2

#### **TEST CASE:**

- 1. While on the contestant panel
- 2. Enter "wzyx123" for the first name, and "abcde" as the last name
- 3. Enter "wa" as the Contestant ID, and press "Save"

#### **EXPECTED OUTPUT**

Error --> Message: Invalid First Name, (must be alphabetic, 1-20 characters

#### ID: 8

**TESTING**: Admin User saving a new contestant

**REFERENCES**: Requirement 4.c.1.2

#### **TEST CASE**:

- 1. While on the contestant panel
- 2. Enter "wxyz" as the first name, and "abcde" as the last name
- 3. Enter "wa" for the Contestant ID, and press "Save"

#### **EXPECTED OUTPUT**

Contestant should be successfully added to the panel/game.

#### **ID**: 9

**TESTING:** Admin User editing existing contestant

**REFERENCES**: Requirement 4.c.1.5

#### **TEST CASE:**

- 1. With newly created contestant selected in the table
- 2. Switch the first name with the last name, and change the id to "aw"
- 3. Press "Save"

#### **EXPECTED OUTPUT**

Contestant should update appropriately in table

**TESTING:** Admin User starting season with wrong number of contestants

**REFERENCES**: No specific requirement

#### **TEST CASE:**

- 1. After adding 0 (weeks-2) contestants, go to the General panel
- Note to add a new contestant, you must press "Add New" at the bottom, otherwise you will continuously edit an existing contestant.
- 2. Press "Start season"

#### **EXPECTED OUTPUT**:

Error --> Message: You must enter x contestants to start.

**ID**: 10

**TESTING:** Admin User starting season with correct number of contestants

**REFERENCES**: Requirement 4.c.6

#### **TEST CASE:**

1. After adding weeks-3 contestants, go to the General panel

2. Press "Start Season"

#### **EXPECTED OUTPUT**

Input Dialog should come up, asking for weekly bet amount

**ID**: 11

**TESTING** Admin User entering incorrect bet amount

**REFERENCES**: Requirement 4.c.6

#### **TEST CASE:**

- 1. At the weekly dollar amount prompt (after starting season)
- 2. Enter anything other than integers

#### **EXPECTED OUTPUT**

Error --> Message: Invalid amount entered.

**TESTING**: Admin User casting off after season started

**REFERENCES**: Requirement 4.c.8

**TEST CASE:** 

- 1. After season has started, go to Contestant Panel
- 2. Select a user from the table
- 3. Press "Cast Off"

#### **EXPECTED OUTPUT**

Table updates appropriately – label changes to note cast off

**ID**: 13

**TESTING:** Admin User undoing that cast

**REFERENCES**: Requirement 4.c.10

#### **TEST CASE:**

1. While still on Contestant Panel

2. Select another user, and then back to the user that was previously cast off

3. Click "Undo cast off"

#### **EXPECTED OUTPUT**

Tables reset to appropriate values prior to initial cast off

ID: 14

**TESTING**: Admin User casting off more than one contestant per week

**REFERENCES**: No specific requirement

**TEST CASE:** 

1. On the contestant panel

2. Select a user and press "Cast Off"

3. Select a second user and press "Cast Off"

#### **EXPECTED OUTPUT**

Error --> Message: Explaining how only one user can be cast off per week.

**TESTING**: Admin User undoing a cast from a previous week

**REFERENCES**: Requirement 4.c.10

**TEST CASE:** 

- 1. After selecting a contestant to be cast off, go to the General Panel
- 2. Press "Advance week", and return to the contestant panel
- 3. Select the contestant that was cast off, and press "Undo Cast"

#### **EXPECTED OUTPUT**

All changes made to the table from "Cast Off" should be undone

ID: 16

**TESTING:** Admin User attempting to advance week without casting

**REFERENCES**: No specific requirement

**TEST CASE**:

- 1. Without selecting a Contestant to be cast off, go to the General Panel
- 2. Press "Advance Week"

#### **EXPECTED OUTPUT**:

Error --> Message: Contestant must be selected to be cast off.

SECTION: ADMIN USER ADDING BONUS QUESTIONS

**ID**: 17

**TESTING:** Admin User adding a multiple choice question correctly

**REFERENCES**: Requirement 4.c.9

**TEST CASE:** 

- 1. Go to the Bonus Panel
- 2. Select Multiple Choice question, and press "Add New Question"
- 3. Enter the question and 3-4 possible answers
- 4. Indicate which answer is correct, and press "Save Question"

#### **EXPECTED OUTPUT**

Question added properly → Message: Question saved!

**TESTING**: Admin User adding multiple choice question, no answer indicated

**REFERENCES**: Requirement 4.c.9

**TEST CASE:** 

- 1. Go to the Bonus Panel
- 2. Select multiple choice question, and press "Add New Question"
- 3. Enter question and 3-4 answers, but do not indicate which is the answer
- 4. Press "Save Question"

#### **EXPECTED OUTPUT**

Error → JMessageDialog: "You must indicate which is the proper answer."

**ID**: 19

**TESTING**: Admin User adding multiple choice question, no question

**REFERENCES**: Requirement 4.c.9

**TEST CASE:** 

1. Go to the Bonus Panel

- 2. Select multiple choice question, and press "Add New Question"
- 3. Enter no question and some answers (or no answers)
- 4. Press "Save Question"

#### **EXPECTED OUTPUT**

Error → JMessageDialog: "No question to be saved."

ID: 20

**TESTING:** Admin User adding short answer question correctly

**REFERENCES**: Requirement 4.c.9

**TEST CASE:** 

- 1. Go to the Bonus Panel
- 2. Select short answer question, and press "Add New Question"
- 3. Enter a question in the question field, and an answer in the answer field
- 4. Press "Save Question"

#### **EXPECTED OUTPUT**:

Question added properly → Message: Question Saved!

**TESTING**: Admin User adding short answer question, no answer

**REFERENCES**: Requirement 4.c.9

**TEST CASE:** 

- 1. Go to the Bonus Panel
- 2. Select short answer question, and press "Add New Question"
- 3. Enter a question in the question field, and leave the answer field blank
- 4. Press "Save Question"

#### **EXPECTED OUTPUT**:

Error → JMessageDialog: "There must be an answer to every question."

**ID**: 22

**TESTING**: Admin User adding short answer question, no question

**REFERENCES**: Requirement 4.c.9

**TEST CASE:** 

1. Go to the Bonus Panel

- 2. Select short answer question, and press "Add New Question"
- 3. Leave the question field blank, and type an answer in the answer field
- 4. Press "Save Question"

#### **EXPECTED OUTPUT**

Error → JMessageDialog: "You must enter a question to be asked!"

SECTION: CLIENT SELECTING WINNER OF COMPETITION

**ID**: 23

**TESTING**: Client User selecting which contestant will win the competition

**REFERENCES**: Requirement 4.d.1.3

**TEST CASE:** 

1. Log in to the BB application

- 2. Select Contestant from the "Ultimate Pick" drop down box
- 3. Press "Save Selection"

#### **EXPECTED OUTPUT**

Selection successfully saved → Message: Selection saved!

**TESTING** Client User updating which contestant will win the competition

**REFERENCES**: Requirement 4.d.1.3

**TEST CASE**:

- 1. Log in to the BB application
- 2. Select Contestant from the "Ultimate Pick" drop down box
- 3. Press "Save Selection"

#### **EXPECTED OUTPUT**

Selection successfully saved → Message: Selection saved!

ID: 25

**TESTING**: Client User selecting the null selection for which contestant will win

**REFERENCES**: Requirement 4.d.1.3

**TEST CASE**:

1. Log in to the BB application

- 2. Select "[??] Null" from the "Ultimate Pick" drop down box
- 3. Press "Save Selection"

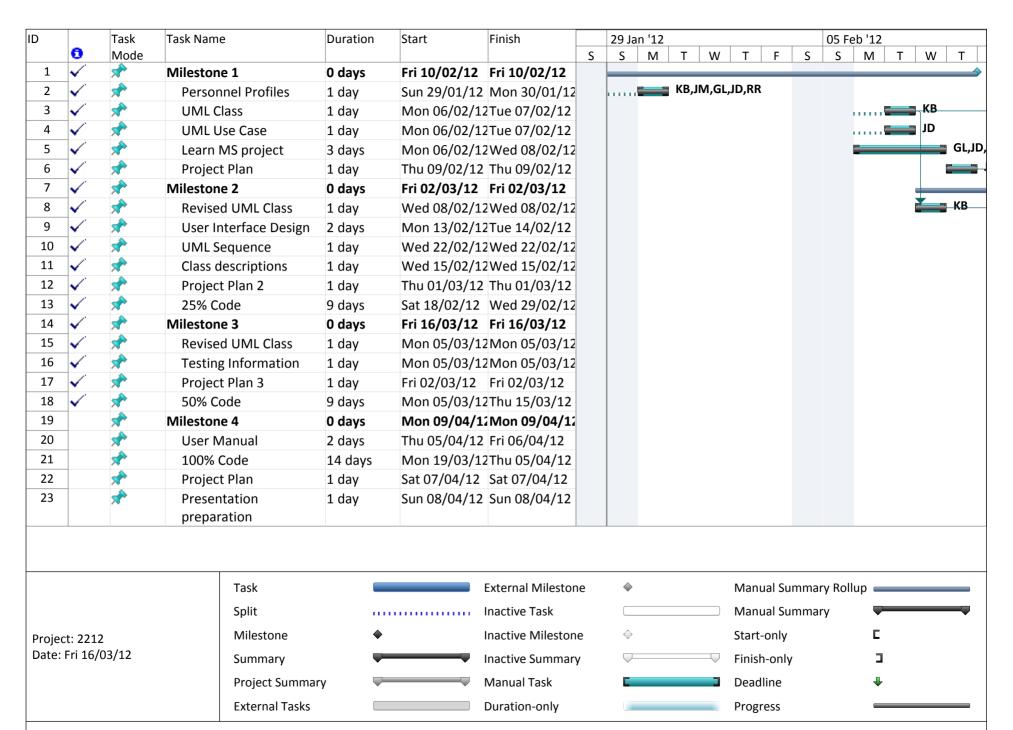
#### **EXPECTED OUTPUT**:

JConfirmationDialog: "Saving will assign you a random contestant. Proceed?"

#### **Section 2:**

### **Driver and Stub Example:**

```
package test;
import java.util.ArrayList;
import data.Contestant:
import data.GameData;
import data.InvalidFieldException;
* Test Case: <a href="Admin">Admin</a> casting off a <a href="contestant">contestant</a> after season started
public class Testing{
      //Constant values for testing purposes
      private static final Integer NUM TEST CONTESTANTS = 6;
      private static final Integer TEST BET AMOUNT = 5;
      private static final String TEST_TRIBE_ONE = "Alive";
      private static final String TEST_TRIBE_TWO = "Dead";
      //DRIVER TESTS TO SEE IF CAST OFF IS WORKING PROPERLY
      public static void driver() throws InvalidFieldException{
             //Instantiate a new GameData object with 6 test contestants.
             GameData g = new GameData(NUM TEST CONTESTANTS);
             //Instantiate valid tribe names for the game.
             q.setTribeNames(TEST TRIBE ONE, TEST TRIBE TWO);
             //Strings to be used to compose test Contestants, so that a season may
be started.
             String[] testID = {"MJ", "BP", "JS", "AJ", "AE", "JB"};
String[] testFirstName = {"Michael", "Brad", "Jessica", "Angelina",
"Albert", "Al"};
             String[] testLastName = {"Jackson", "Pitt", "Simpson", "Jolie",
"Einstein", "Capone"};
             String[] testTribe = {TEST_TRIBE_TWO, TEST_TRIBE_ONE, TEST_TRIBE ONE,
TEST_TRIBE_ONE, TEST_TRIBE_TWO, TEST_TRIBE_TWO);
             //Instantiate and add the 6 test contestants to the game.
             for (int i = 0; i < 6; i++){
                    Contestant c = new Contestant(testID[i], testFirstName[i],
testLastName[i], testTribe[i]);
                    g.addContestant(c);
             //Start the season, so that contestants may be cast off, and the weeks
can be advanced.
             g.startSeason(TEST BET AMOUNT);
             // TEST 1: CAST OFF THE (TEST) CONTESTANT "JESSICA SIMPSON"
             to be cast off
             g.advanceWeek();
                                                                          //advance the
week, committing the cast off
             // CONFIRMATION/OUTPUT: isCastOff returns true if contestant NOT casted
off
```



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