# CS 2365 Object-Oriented Programming

## Project 3 expansion

# Deliverables

- **Deadline, Wednesday, April 8th, 2020**
- Submit Preliminary Design Project 3.
    - UML Use Case Diagrams and their Specifications
    - Class-Responsabilities-Collaborators (CRC) Cards
    - UML Class Diagrams
    - Sketch of GUI
    - Preliminary list of Assignments per Team member.

# Project 3 Expansion

- Model the Game **Bang! Dice Game** and *the selected modules from its expansions*, using OOP.

- Document your OOAD using Use-Case Diagrams and Class Diagrams, updating your preliminary analysis and design.

- Code your Model in Java

- Use JavaDoc for all your classes

- Perform Unit and Integration Testing on your Cod.

- Provide a GUI interface using JavaFX

- Your implementation should provide the means for a person to play the game against 3 to 7 automated players that play according to their roles and adapt their own strategy as the roles of the other players are revealed upon elimination.

# First Game Expansion

## • Old Saloon

1. **The Loudmouth and the Coward ( Two Dice)**
2. **The Arrow of the Indian Chief**
3. **Special Roles (Abilities)**
4. **A Posse of New Characters (New Characters)**
5. **The Ghost (Only with 5 or more players)**

# Second Game Expansion



## Undead or Alive

https://www.dvgiochi.com/giochi/bang-thedicegame-undeadoralive/download/BANG!DiceGame_UndeadOrAlive_Eng_Rules.pdf

1. **Look Me in the Eyes**
   **(New Dice)**

2. **Two Bullets Are Enough**

3. **A New Posse in Town**
   **(New Characters)**

4. **Undead or Alive?**
   **(Only with 4 or more players)**
   **11 Boneyard Cards**
   **2 *0-Hands*, 6 *1-Hand*, 3 *2-Hands***

5. **Wild West Legacy**

# Expansions (Modules to include in project)

There are two expansions with 5 modules each one but you are only adding the following modules to the project

- **From *Old Saloon***
  - **Module 1 – The Loudmouth and the Coward (Dice)**
  - **Module 2 – The Arrow of the Indian Chief**
  - **Module 4 – A Posse of New Characters (Jose Delgado, Tequila Joe, Apache Kid, Bill Noface)**

- **From *Undead or Alive***
  - **Module 1 – Look Me in the Eyes (Dice)**
  - **Module 3 – A New Posse in Town (Belle Star, Greg Digger)**
  - **Module 4 – Undead or Alive? (Only with 4 or more players)**

# Expansion (Pool of Characters)

## Characters

- **Bart Cassidy**
- **Black Jack**
- **Calamity Janet**
- **El Gringo**
- **Jesse Jones**
- **Jourdonnais**
- **Paul Regret**
- **Pedro Ramirez**
- **Rose Doolan**
- **Suzy Lafayette**
- **Vulture Sam**
- **Jose Delgado***
- **Tequila Joe ***
- **Apache Kid ***
- **Bill Noface***
- **Belle Star****
- **Greg Digger****

From the list of characters, select the ones to include in your project, implementing their abilities
- From the Basic game include at least 6 characters, preferable 8
- From the "**Old Saloon**" expansion include at least 2 characters  (*)
- From the "**Undead or Alive**" expansion include both characters (**)

At the **START** of the program select if you want to use the expansions or not.
* Your team can decide if they want to select modules individually.

If the expansions are used
- Two out of the white basic dice are replace with the two black dice.
- The arrow of the Indian chief is added to the pool of arrow for a total of 10
- The boneyard cards are shuffle and set in a pile to draw from
- The player can replace one white dice with the loudmouth or the coward dice for this turn.
  Examples dice combinations:
  - 2 white dice, The Loudmouth and the 2 black dice.
  - 2 white dice, 2 black dice, the coward dice
  - 3 white dice, 2 black dice.
  - 2 white dice, 2 black dice, the coward &the loudmouth dice
    (*Tequila Joe* or *Jose Delgado* characters only)