

**AP Computer Science Fall Project Presentation
Template**

**Each of the items below must be able to be demonstrated in a WORKING Java program
that meet student-stated program objectives/specifications**

Program	Possible Points	Your Points	Comments
Relational Operators (three or more of the following) >, <, <=, >=, ==, !=	50.00	50.00	
If then else statement	50.00	50.00	
for each AND while AND for loops	50.00	50.00	
ONE Student Designed interface and at least THREE Student Desgined classes - Classes contain constructors that initialize instance variables/objects	50.00	50.00	
At least one instance of "Class Composition" is used in the project design	50.00	50.00	
Interaction between classes - Methods from one class are called from another class	50.00	50.00	
Inheritance Hierarchy with student designed class(es) a. Inheritance structure is justified with either: unique instance variables(s) and/or unique method(s) b. hierarchy consists of at least three levels c. hierarchy includes overridden method(s) d. hierarchy includes overloaded methods(s)	100.00	100.00	
Interface must be implemented with student designed class(es) - The class that implements the method in the interface works as specified	50.00	50.00	
Polymorphism must be implemented with student designed class(es)	50.00	50.00	
Class ArrayList is used in at least one student-designed class	50.00	50.00	
Class array is used in at least one student-designed class	50.00	50.00	
Algorithmic Complexity			
The following should be included in a "brain method" in one of more of the student-designed classes for full credit			
Level 1: if statement in the context of a for loop	50.00	50.00	
Level 2: if statement in the context of a for loop with one or more boolean operators For example: if(row > 0 && row < table.length)	50.00	50.00	
Level 3: data is "counted" in the context of a loop	50.00	50.00	
Level 4: data is "added" or "removed" in the context of a loop	50.00	50.00	
Level 5: data is "moved" in the context of a loop	50.00	50.00	
Level 6: passing an object (or objects) as a parameter to a method	50.00	50.00	
Level 7: returning an object from a method	50.00	50.00	
Level 8: at least one of the above levels include a String as the data and use one or more the methods of the String class	50.00	50.00	
Comments/Style			
Comments for special algorithms or a tricky set of code	25.00	25.00	
Meaningful variable names	25.00	25.00	
Javadocs for all methods in one Student Designed Class	25.00	25.00	
Powerpoint Presentation Slides			
Title Slide	25.00	25.00	
Description of program operation	25.00	25.00	
Demonstration of Program	25.00	25.00	
UML Diagrams for each class	25.00	25.00	
Use of classes in project	25.00	25.00	
Description of class interaction	25.00	25.00	
Description of Inheritance Hierarchy	25.00	25.00	
Description of use of Interface	25.00	25.00	
Description of use of polymorphism (with code snippet)	25.00	25.00	
Special features	25.00	25.00	
Known bugs	25.00	25.00	
Citations of "second-party" code	25.00	25.00	
Conclusion	25.00	25.00	
Questions	25.00	25.00	
Email Requirements to Mr. Lew (mlew@loyolahs.edu)			
An email is sent to Mr. Lew by 8:00 am on the morning of the presentation	25.00	25.00	
A PDF file of the Powerpoint/Keynote presentation is attached to the email	25.00	25.00	
A link to a 2-3 minute YouTube video explaining the basic operation of your game	25.00	25.00	
The email body includes "Description", "How to play", and "Special Features" text for the website	25.00	25.00	
Post Project Debrief			
Post Presentation Debrief is completed	25.00	25.00	
1550.00		1550.00	100.00%