

Project

Due: 10:00 pm, Wednesday, May 15

Use **GUI, graphics, colors, sounds, animations or images, event handling, exception handling, Layout managers, file I/O and other techniques** in Java to develop **math-learning program as an educational game for pre-school or first grade kids**. The game should be **interactive and display player's names and scores**. A file will store the top 5 player's names and scores, and be displayed when a button is pressed any time during the game. Your game must be attractive to the kids to play and at least 10 different questions will be displayed.

You may complete this project as an individual effort or as a group with 2 to 5 people. You will use the discussion board in Canvas to form a group. Report your group info (names, emails, and cell #s) to my email for approval if you decide to work as a team.

Individual Effort Requirements if you complete the project by yourself

You have complete all of described tasks above.

Group Activity Requirements if you complete the project a group

All the following will be counted as 20% of your project score:

1. Each group member must be involved and contributed in this group project.
2. At least three group meetings must be held. At each meeting, a meeting log must be recorded in which when, where, who, and what information must be clearly stated.
3. A group member may be asked to explain the part he/she completed in the project.

Submission Requirements for all

Submit all of the following parts as a zipped file of an Eclipse project via Canvas in the Assignments link by clicking on Project:

1. A cover page in which it shows your name or names of all your group members and what portion of the project each member accomplished, and other necessary information (class name, section # and project title).
2. A separate description pages in which you describe your project and each class (data and methods). Flow charts and diagrams are encouraged to use.
3. Screenshots of important game play for me in better grading.
4. The group meeting logs if you did it as a group. Handwriting is not acceptable.

Note: You and your group will earn zero point if your project is identical with the program completed by previous students before. Example the previous student completed projects are available upon your request in the scheduled help session that will be announced a week before it is due.

Steps to make a zipped Eclipse project file

1. Create your lab as a Java project and all of source code should be in this project.

2. Highlight the project title and make right mouse click, select **Properties**, and you will see the directory or folder in your computer where the project is saved.
3. Navigate to that directory, copy that folder to a different directory, say **C:/Temp**, and click on the right mouse button, select **Sent to**, and select the **Compressed/zipped folder**. Your file is ready for submission.
4. For test if your file can be opened in Eclipse, select **File**, then **Switch Workspace**, and select **Other...**, type a new directory as your new workspace for test, say, **Desktop/MyLabs**, Eclipse will create a new workspace. Select **File**, **Import...**, click on **General**, then **Existing Project into Workspace**, and click on **Next**, click on **Select archive file** button, navigate to the zipped project file, and then click on **Finish**. It should be executable now if your project is correct.