

**Project 5 – Space Invaders**  
**Taking You Through the Applied Design Stages**

As you design and program your Space Invaders project, you are going to complete some of the Applied Design stages.

By following the steps below and answering the questions, your Space Invaders Game project will be better planned, better designed and better implemented.

You will revisit these Applied Design stages throughout the course.

**UNDERSTANDING CONTEXT:**

Before beginning your program, look carefully at the design requirements to understand the context of the program. For this assignment you will not be interviewing the end-user. Instead, your task is to carefully adhere to the program requirements listed for the Space Invaders Game. By adhering to there requirements you are ensuring that you understand the context of the game itself.

Identify and briefly describe the main requirements of the Space Invaders project in the space below.

**DEFINING:**

Based on the requirements listed above, as well as some of your ideas, write down any and all themes, players, invaders, projectiles and level backgrounds. Explain how each one will be used.

Identify the components in the brainstorming above that might be difficult to program based on your current knowledge. What can you do to solve this problem before starting to program?

**IDEATING:**

Based on the program requirements and brainstorming above, provide a brief description of the components that you are going to include in your Space Invaders Game..

Explain why you chose these changes based on the requirements, brainstorming and after identifying possible difficulties that you might encounter.

**IDEATING/PROTOTYPING:**

Begin work programming your Space Invaders game. Make sure that you program in small parts and that you continually run and debug your code.

In the space below, write down some of your observations about the programming process. What did you notice as you created this larger project? What components were difficult and what components were simple? What strategies did you use to facilitate the programming? What tips would you have for someone who was working on a similar project?

**TESTING:**

Find a friend or classmate and have them test your Space Invaders Game. Ask them to comment on the theme, the action, the controls, the player, the invaders, the projectiles, the levels, the programming and the overall appeal of the game. Write down some of their comments below.

Considering the observations from your friend or classmate above, indicate any changes you might make to the program. If you are no going to make any changes, indicate why.

**SHARING:**

When you have completed your Space Invaders Game, and made all final changes, share it with your friends and classmates. Indicate some of the feedback that you receive on your game in the space below.

Based on the feedback you have noted above, are there any people or groups that might enjoy this program?