Project Part 2

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Title: Galaga Recreation

Project Summary: As a team we are trying to implement the old Galaga game with the same basic functionality as the original with multiple levels, different spacecraft’s, and colors. When we are finished with the game we want to have a fully functioning Galaga game with with extra functionality such as power ups.

Project Requirements:

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| **Business Requirements** | | | | |
| ID | Requirements | Topic Area | User | Priority |
| BR-001 | No Business Requirements | N/A | N/A | N/A |

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| **User Requirements** | | | | |
| ID | Requirements | Topic Area | User | Priority |
| UR-001 | User’s ship has to move left or right with its respected arrow keys |  | General User | Medium |
| UR-002 | User’s ship shoots gun to try and hit enemy spacecraft using space bar |  | General User | Medium |
| UR-003 | User can pause the entire game by using the ‘p’ key |  | General User | Low |

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| **Functional Requirements** | | | | |
| ID | Requirements | Topic Area | User | Priority |
| FR-001 | Non-Player Characters (NPCs) travel on different predetermined paths when entering the screen at the beginning of the game |  | NPCs | High |
| FR-002 | NPCs don’t overlap on different flight paths |  | NPCs | Medium |
| FR-003 | NPCs can fire after their shooting cool down period |  | NPCs | Medium |
| FR-004 | NCPs have varying point values |  | NPCs | Low |
| FR-005 | NCPs get destroyed when hit |  | NPCs | Low |
| FR-006 | NCPs have different health |  | NPCs | Low |
| FR-007 | User ship has shooting cool down period |  | General User | Medium |
| FR-008 | User’s ship gets destroyed when hit and tracks the amount of lives left |  | General User | Medium |
| FR-009 | Track total score and levels |  | General User | Low |
| FR-010 | Keep track of high scores |  | General User | Low |

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| **Non-Functional Requirements** | | | | |
| ID | Requirements | Topic Area | User | Priority |
| NFR-001 | User has to be able to run a .jar file |  | General User | N/A |
| NFR-002 | Include a readme (usability/user controls) on the title screen |  | General User | Medium |
| NFR-003 | User can pick to read high scores or play game on title screen |  | General User | Low |
| NFR-004 | If user gets high score allow them to type name in on the exit screen |  | General User | Low |
| NFR-005 | If user dies allow option to play again or exit |  | General User | Medium |

Users and Tasks:

Activity Diagrams:

Data Storage:

UI Mockups:

User Interactions:

Class Diagrams: