**StellCon Functional Requirements**

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| **ID** | **Requirement** | **Notes** | **Priority** |
| g.12 | the gameboard randomly creates solar system tiers |  | 5 |
| g.13 | the gameboard randomly creates starting fleers within solar system |  | 5 |
| g.18 | the game board view will allow for panning and zooming |  | 5 |
| t.10 | a solar system can revert to unowned |  | 5 |
| t.11 | a solar system can change ownership |  | 5 |
| g.09 | the gameboard randomly designs a map |  | 4 |
| i.01 | The gameboard interface will display amount of resources the player earns each turn |  | 4 |
| i.02 | The gameboard interface will display how many resources have been used for research. |  | 4 |
| i.03 | The gameboard interface will display the number of fleets earned/left to play |  | 4 |
| i.04 | The gameboard interface will display with powerups have been unlocked | Each powerup is only used once before needing to replenish research with surplus resources | 4 |
| t.01 | A player can use a stellar bomb on a solar system not owned by that player to destroy half the fleet or remove a defense net. | Cost 20 metal resources. | 4 |
| t.02 | A player can terraform a solar system to improve the resources provided from that system. | Only can be used once per system. Costs 20 terrain resources | 4 |
| t.03 | A player can use a defense net on a solar system to protect the system form attacks | Lasts 3 turns and can be removed with a stellar bomb. Costs 20 crystal resources | 4 |
| t.04 | A player can create a wormhole starting on one of their systems to anywhere on the map. | Lasts 3 turns. Costs 20 fusion resources | 4 |
| t.05 | A player can place fleets on any of their solar systems | The number of fleets to place each turn is determined by the resource with the lowest production amount. Unplaced fleets do not carry over to the next turn | 4 |
| t.06 | A player can move their own fleets to any system they own. |  | 4 |
| t.07 | A player can attack enemy systems that neighbor their systems. |  | 4 |
| t.09 | Resources in surplus will be automatically used for research. The amount put into research is equal to the difference of the surplus resource and lowest producing resource. This applies to all research. |  | 4 |
| g.05 | The game will have an interface that allows for user input |  | 3 |
| g.10 | the gameboard randomly connects distance solar systems |  | 3 |
| g.11 | the gameboard randomly assigns player home worlds | must be adequately spaced out | 3 |
| i.05 | The gameboard interface will display all players resource earning, available fleets to place, and systems occupied. | This will display in order of first place to last | 3 |
| i.08 | The gameboard interface will allow adjustments to the number of fleets sent to a system or to cancel a movement. |  | 3 |
| i.09 | a player can select a solar system for interaction this will display stats about the system |  | 3 |
| i.10 | a player can select another player for interaction |  | 3 |
| t.08 | When all players finish their turn, fleets, powerups, and movements are completed first, then attacks commence. |  | 3 |
| t.13 | the game will remove powerups that have turn limits |  | 3 |
| t.12 | the game will check if the game has completed |  | 2 |
| g.03 | The game will have a turn-based system | Check Unity asset store All players will take their turn at the same time. There will be a button to End turn. | 2 |
| g.15 | the game will display stats of the game once the game finished |  | 2 |
| i.06 | The gameboard interface will display time left for the turn in seconds |  | 2 |
| i.07 | The gameboard interface will allow the player to end their turn early | If all players end their turn early then the movements, powerups and attacks will take place and their next turn will start. | 2 |
| i.13 | a player can select amount of turns a game has |  | 1 |
| g.08 | The game will have computer players |  | 1 |
| i.11 | players can pick gameboard size |  | 1 |
| i.12 | players can pick number of opponents |  | 1 |
| g.14 | computer opponents must have basic AI |  | 0 |
| g.01 | The game will allow users to register | Check Unity for a prebuilt component in the asset store | 0 |
| g.02 | The game will have a high score | This will be a website with data pulling from the API | 0 |
| g.04 | The game will have multiplayer match making | Check Unity asset store 2-8 players | 0 |
| g.06 | The game will have a lobby | Check Unity asset store | 0 |
| g.07 | The game will have a chat system | Check Unity asset store | 0 |
| g.16 | the game will have a player ranking system |  | 0 |
| g.17 | the player can choose if the game is a rated or unrated game |  | 0 |
| t.14 | the game will store permanent data about player stats |  | 0 |