Suggested Asteroids Project Features   
CS 1200 Fall 24

# Suggested Features with Potential Points

This is a list of suggested features and the points that will be awarded if the feature is correctly implemented. Teams are encouraged to implement only the features from this list. However, if the team wishes to implement some unique feature not on the list, it is suggested that their idea be presented to the professor for his signoff.

When completing your team’s features list document, the selected features must total at least 100 points.

| **Feature Name and Description (Names are Underlined).** | **Points** |
| --- | --- |
| Change Game Sprites (image files only). Must change the Ship, Missile, and two Asteroids Sprites. The ship sprite must have two frames as described in class. Must change to new image files! Simply recoloring existing sprint images will not be accepted. | 15 |
| Change Game Sounds (wav files only). Change all game sounds. | 15 |
| Add Background Music: See SoundFile.loop(). The background music must be balanced against the game sounds. It must be possible to hear both background and game sounds while playing. See Soundfile.amp(). | 15 |
| Change Static Background (static or **animated GIF image** file only). | 15 |
| Add Dynamic Background. The level’s background uses graphics that change position, color, etc. e.g. Sprites or Processing Graphics. This is not Animated GIF image. | 25 |
| Display Hit Ratio Text. Display the overall percentage (textual) of shots fired / hits using text only. Format float to only two decimal places. | 15 |
| Pause / resume game play with key press. You must solve the ‘stopwatch’ problem to get the points. | 25 |
| Display Points Text. Display stats of the game (textual) The meaning of score is at the team’s discretion. Number of asteroids destroyed, etc. | 15 |
| Ship Health Graphical Display. Change the game to include a single ship and devise a method of taking multiple hits to destroy. Must be a graphical (not simply text). | 25 |
| Asteroids Health Points. Multiple hits are needed to destroy an asteroid | 25 |
| Saved Points System: Saving the player's score to a file and display on next game startup. | 25 |
| Infinite Level: Feature was described in slides. | 25 |
| Enemy Ship: Add a new Game Object that moves randomly and shoots missiles that can damage player’s ship. | 25 |
| Additional Level Simple: Add new levels to the game by duplicating a current level and making simple changes (additional asteroids). Can be applied only once. | 15 |
| Additional Level Challenging: Add new levels with a unique and challenging feature. Describe in the features list. Adding additional asteroids is consider a simple change. | 25 |
| Display Remaining Lives Textual: Add a textual presentation of remaining ships / lives. | 15 |
| Display Remaining Lives Graphical: Add a graphical presentation of remaining ships / lives. | 25 |
| Add Powerup: Add a new type of power up to the game. 25 for first unique powerup, 15 for each additional PU. | 25/15 |
| Powerup Trigger: Add the ability to trigger powerups with both ship collision and missile hit. | 25 |
| Streak Effect. Graphical or audio presentation with player accomplishment e.g. when player hits asteroids with three consecutive missiles or something like this. | 25 |
| Custom Ships: Allow player to select one of multiple ship's sprites (Images) | 25 |