**Project Description:** You control a spaceship which has deliberately hard controls (pitch, yaw, roll, thrust mapped to three buttons each: left thrust, stabilize, and right thrust) who’s sole purpose is to make it from planet to planet to refuel while flying through an asteroid field. The spaceship will have three hits on it. Hits and fuel will replenish when landing on the next planet. Crashing into a planet will punish the player by them starting with two hits instead of three. There will be a HUD overlay on the screen to relay fuel levels, hits left, and various thruster levels.

**Skills Overview:**

* Background will be a field of stars.
* Asteroids will have a texture applied to them. Planets will have a texture applied to them and it will act as a floor of sorts.
* There will be randomly generated trees on the surface of each planet to make landing harder. As the game continues, there will be more and more trees to force the spaceship to find a new landing spot. Five non-primitive objects: Spaceship, RCS thrusters, Trees, Asteroids, Planets.
* There will be a sun which blasts light on the scene.
* There will be multiple floodlights on the spaceship to light up near parts of the scene
* Asteroids will explode when hitting the spaceship or the planet shield. The planet will dent if the spaceship lands too hard.
* The spaceship will move under user control (Or everything will move towards the spaceship to keep the spaceship centered at (0,0,0)... I haven’t decided how I want to implement that yet)
* If a weapons system is developed for the spaceship, the weapon on the ship will move demonstrating limb movements. Else, there will be a basic alien which waves at you when you take off from each planet
* There will be a HUD displaying user information as well as a hotkey to bring up status information of the spaceship (position / rotation of spaceship)
* There will be a button to cycle through 5 viewpoints of the spaceship. POV, Landing cam, and three third person views: Looking forwards from diagonally up from the back of the spaceship, Looking backwards from diagonally up from the front of the spaceship, and a very wide shot of the spaceship so as to see all asteroids in vicinity.

Let me know what you think and if I need to adjust this to match the specifications more! I tried to go down the list of bullet points that you made and match up the skills to each requirement.

Thanks!