Fundamentals of Game Development course project work

The project is quite free form. Your task is to show that you can handle Godot game engine and develop a simple game with it. You can use free licensed graphics, sounds, musics and such, but make sure that the license allows the use of them! CC0 is the best.

Your game can be 2D or 3D, it can use pixel art, 1 bit graphics, HDR or whatever you want to use. The project is graded based on the features it has and how well they are implemented. The following list is just a sample and you can develop your own features and give them points. The maximum number of points one can collect is 30. Also if you develop some 2-3 point feature listed below and it is not as advanced as described, you can still get less points from that feature.

The game has to have some feature, so that it can be replayed over and over again so that the gamer can achieve a better score / faster time / etc. (If you have a plan to build a game that could not fit into this format, just contact the responsible teacher.)

The documentation MUST also include declaration of AI usage:

1) Name all AI systems that were used in the development of the contents of this document, and for each

2) How and where they were used (illustrations, proofreading, getting ideas for text, to generate diagrams etc.) or

3) Clearly state that no AI assistance or tools were used in this assignment.

Feature	Points
The game can be played, it does not crash, the player does not get stuck, etc.	2
The game has consistent and coherent visual look	2
The music and sound effects are in balance	2
The game supports various control options (e.g. keyboard and mouse / touch screen / gamepad)	2
The game has setting screen, where gamer can customize settings (e.g. music and sfx volume)	2
The game has dynamic lightning (i.e. the lightning varies on different areas / times of the game)	3

The game has enemies that can be destroyed	2
The enemies have "some intelligence" (state machine is enough)	3
There are some collectable items in the game (e.g. coins, ammo, guns, starts…)	1
The game area is bigger than just one screen	1
There are different menu and game scenes	1
There are various maps with increasing difficulty	2
Gamer can see how fast/good she passes the level/map	1
All the settings and game records (high score / TOP10, passed levels, etc) are stored in a save file(s)	2
Finishing something (eg. a map) unlocks something else (e.g. another map)	2
Game can have multiple players simultaneously (it is enough that they use the same keyboard, think of the old game Pong)	3
Shader effects are used to improve the visual style and immersion	2
The game has a real story unfolding while the gamer advances in the game	2
Physics engine is used in innovative way (e.g. there are areas where the gravity changes or some enemies have reversed gravity, etc)	2
Music adapts to game situations (e.g. the health level is lower, music is more intensive)	2
There are bugs (Each bad bug can decrease the total points based on their severity. Typos and small glitches are not an issue.)	-1 – -5
There is hate speech, sexisms, racism or any other harmful material	-100