CS427: MID-TERM PROJECT REPORT

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**I/ Introduction:**

* As mentioned at the header of the GitHub page of the project, this game is made as an attempt to remake the game Megaman X6, a platform action game created by Capcom. All the resources in this game is taken from many sources, mainly from fans. Details of these sources will be mentioned below.

**II/ Features & techniques**

* The game use the movement system adapted from Brackey (<https://github.com/Brackeys/2D-Character-Controller>) with some modification. This system is not only implemented to the main character, but also one type of enemies.
* The ray casting technique is used in some features of the game:
  + Player in wall checking component
  + Enemies in detecting the player
* Holes and drills use the instant death feature – simply inflict a big amount of damage which exceeds the amount of health of the main character onto him.
* State – machine setting is used in almost everything with the main purpose is to create animations and helps making the AI.
* Attempts to create parallax scrolling effect had been made, but encountered several problems.
* Checkpoints is primarily implemented, however this feature can only be triggered by hand with the Backspace button.
* The usage of tile palette and tile map is used to create the terrain of the scene. However, the tile collider cannot be used to check the physics because of some problems in checking ground.

**III/ Resources:**

* Backgrounds: Background HQ (<https://bghq.com/bgs.php?n=uy>)
* Character sprites: Sprites INC. (<https://www.sprites-inc.co.uk/sprite.php?local=X/X6/Cutscene/>)
* Sounds: The VG Resources (<https://www.vg-resource.com/thread-22059.html>)
* Attention: Rights of resources used in this fan-made game is reserved by Capcom.