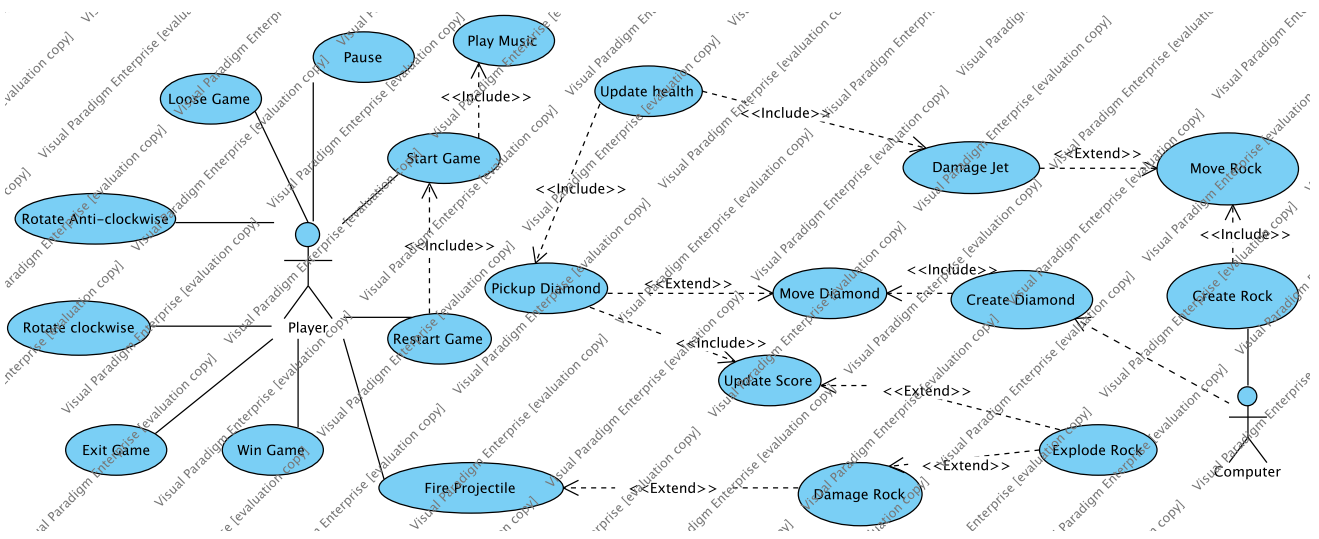# CO453 - Application Programming App 05 MonoGame

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1. App 05

👤 2. Computer

ID: AC02

🔵 3. Create Diamond

ID: UC10

Create a new diamond with fixed rotation, direction and speed

🔵 4. Create Rock

ID: UC07

Create a new rock with fixed rotation, direction and speed

🔵 5. Damage Jet

ID: UC09

Jet will take the damage by hitting the rock

🔵 6. Damage Rock

ID: UC05

firing projectile will damage the rock

🔵 7. Exit Game

ID: UC20
The user will press Esc key and the game will quit.

8. Explode Rock
ID: UC06
firing projectile 3 times will explode the rock

9. Fire Projectile
ID: UC04
the jet will fire the projectile by using the F key.

10. Loose Game
ID: UC17
As the game proceeds, the falling rocks and the rocks coming from other direction will try to hit the jet causing damage and if the jet is hit by five rocks consecutively, then the game will be lost!

11. Move Diamond
ID: UC11
the diamond moves at fixed rotation, direction and speed

12. Move Rock
ID: UC08
the rock moves at fixed rotation, direction and speed

13. Pause
ID: UC18
During the game, the player can pause the game by pressing the space bar key and resume back the game by pressing it again.

14. Pickup Diamond
ID: UC12
the jet has to collect diamonds to increase the health and the score. A sound will be played when the jet picks up the diamond

15. Play Music

ID: UC19

With the start of the game, the music will play.

16. Player

ID: AC01

17. Restart Game

ID: UC15

The player can restart the game by pressing the R key

18. Rotate Anti-clockwise

ID: UC02

User will press the left-hand arrow key and the jet will rotate 1 degree anti-clockwise to the right

19. Rotate clockwise

ID: UC03

User will press the right-hand arrow key and the jet will rotate 1-degree clockwise to the right

20. Start Game

ID: UC01

Before the user starts a game, a jet will be created and placed at a start position on the left of the screen. Three rocks will be stationery on the right-hand side of the screen, ready to move in the direction of the jet. There will be a sky background image. Message will prompt stating to start a new game, and the user will have to press the Enter key to start the game.

21. Update health

ID: UC14

If the jet is hit by the rocks, it's health will be decreased, but if the jet collects the diamond, it will increase its health.

22. Update Score

ID: UC13

If the jet is hit by the rocks, its score will be decreased, but if the jet collects the diamond, its score will increase