

Thursday 04/06/2024 –

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Csci452 Topics in Computer Science.

Project Topic: Indie game development in 2024.

Background: in the past 10 years game development has been easier due to the development of game engines. But sometimes a well rounded game needs development from scratch and for the person to make his own game engine.

I will be presenting all the different games I made in the past as examples:

-Java- native : Snake Game.

-Java- libgdx framework: Water Drop Catching.

-Dart- Flutter : pokemon like top-down rpg for mobile + DB

-gml- game maker : harvest moon like top down rpg for PC

-C#- visual studio: multiple choice question game.

The purpose is to compare time vs effort and quality and cost. Since the market leaders in this domain are unity and unreal engine. But some creative people are able to turn profit games with low-end cost simply by understanding the different concepts of game development and the needs of the final product.

This is why we will be studying the following sequentially in our research:

-What is a game engine

-Source engine(Used by valve the company that owns the steam store)

-Unity vs Unreal

-Developing your own game engine

- game maker and GML(case study)

-Flutter vs Visual studio(preliminary)

-Cross platform development

-Comparing each of the before mentioned software(Table):

Engine	Language	Target	Cost	Learning Curve	Efficiency
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I will be using as reference indie developers that were able to achieve success by understanding these concepts and the methods they used.