

## **UNITY ENGINE**

Unity is a cross-platform game engine developed by Unity Technologies, first announced and released in June 2005 at Apple Worldwide Developers Conference as a Mac OS X game engine. The engine has since been gradually extended to support a variety of desktop, mobile, console and virtual reality platforms. It is particularly popular for iOS and Android mobile game development, is considered easy to use for beginner developers, and is popular for indie game development. The engine can be used to create three-dimensional (3D) and two-dimensional (2D) games, as well as interactive simulations and other experiences. The engine has been adopted by industries outside video gaming, such as film, automotive, architecture, engineering, construction, and the United States Armed Forces.

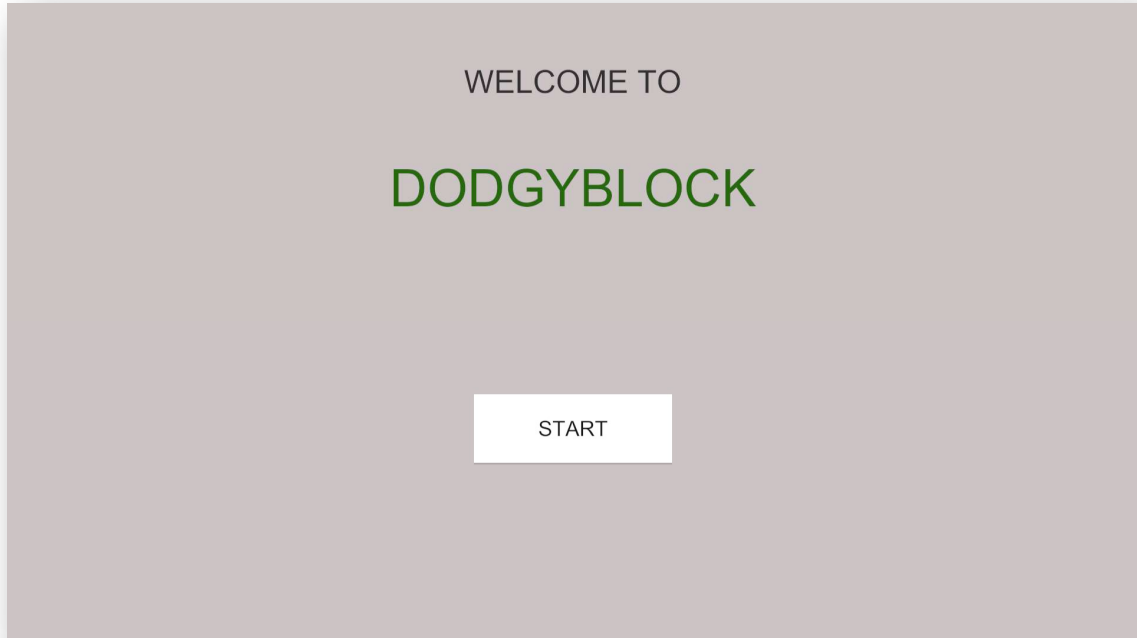
## **ARCADE GAMES**

An arcade game or coin-op game is a coin-operated entertainment machine typically installed in public businesses such as restaurants, bars and amusement arcades. Most arcade games are presented as primarily games of skill and include arcade video games, Pinball machines, electro-mechanical games, redemption games or merchandisers. Arcade video games were first introduced in the early 1970s, with Pong as the first commercially successful game. Arcade video games use electronic or computerized circuitry to take input from the player and translate that to an electronic display such as a monitor or television set.

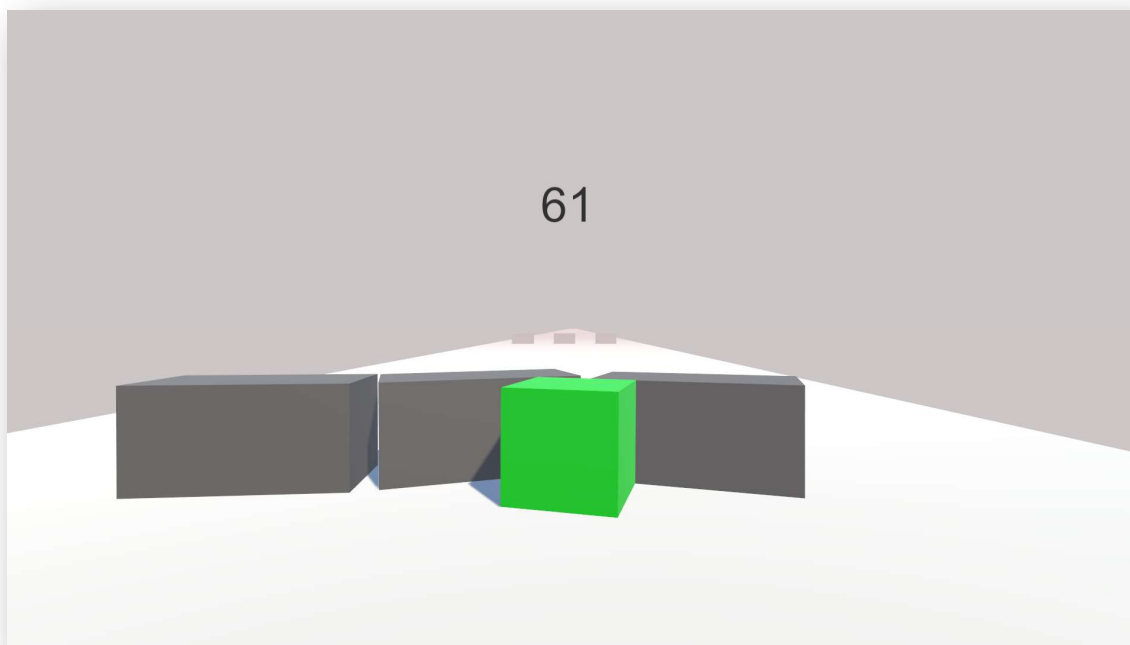
## **DODGYBLOCK**

Dodgyblock game is built using unity engine. It is a simple arcade game which has three levels. The player is a cube that runs on a track full of obstacles. Player can move left by pressing key A or right by pressing key D while running in order to avoid collision with the obstacles. Collision with any of the obstacles or falling off the track restarts the game from beginning of the current level. Obstacles are cuboids placed randomly on the track. Reaching end of the track marks completion of a level and starts next level. Completing three such levels with increasing difficulty completes the game. A player can also see their score on the screen which is indicative of the distance travelled in the level without any collision or off the track fall.

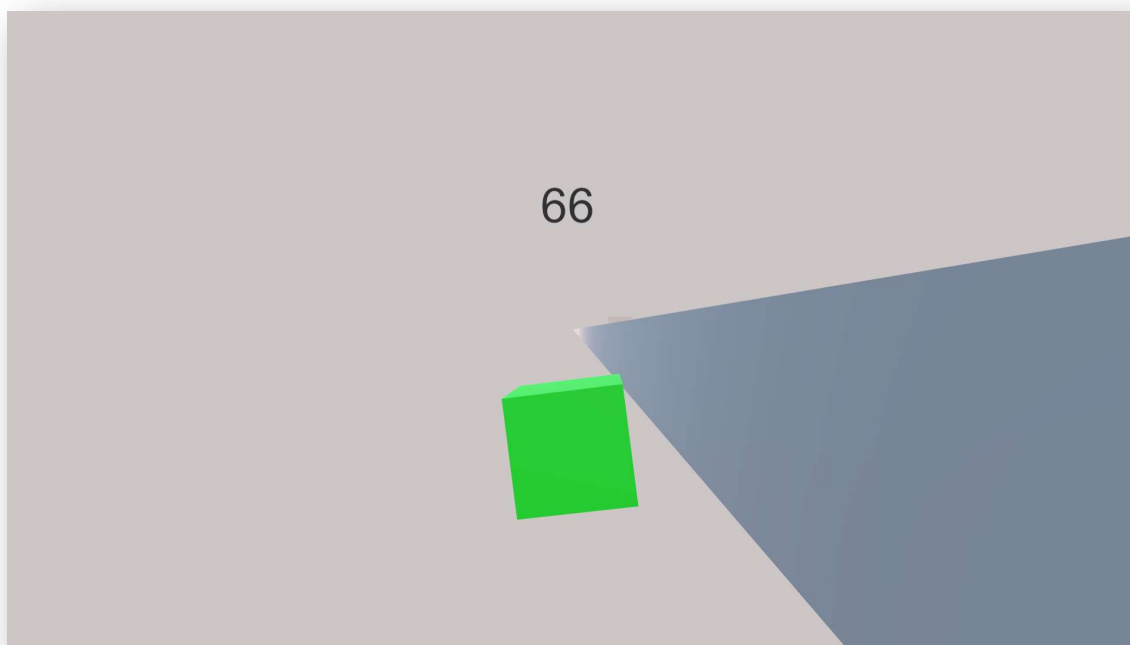
## SCREENSHOTS OF THE GAME



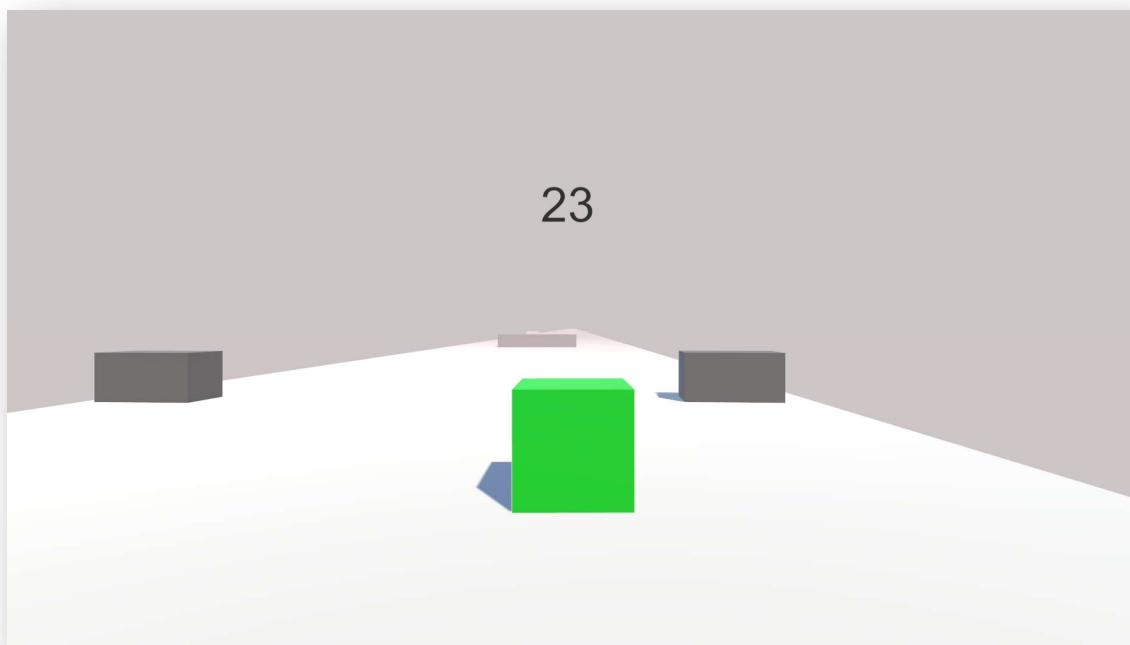
**Fig 1** Starting screen of the game



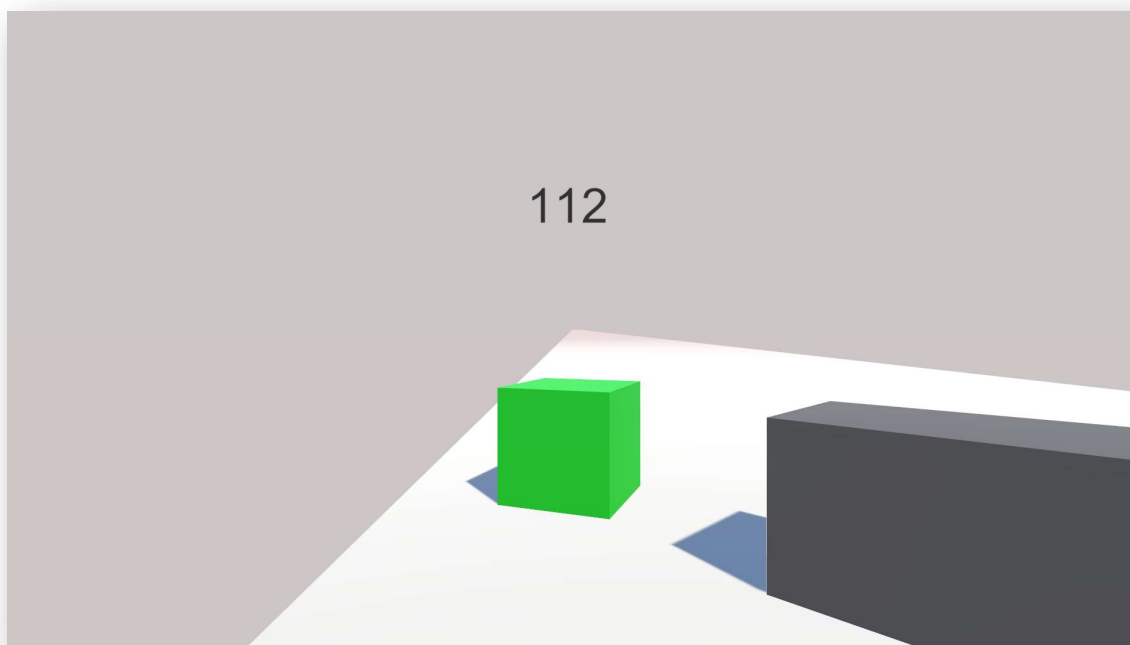
**Fig 2** Game over due to obstacle collision



**Fig 3** Game over due to falling off the track



**Fig 4** Level 2 of the game



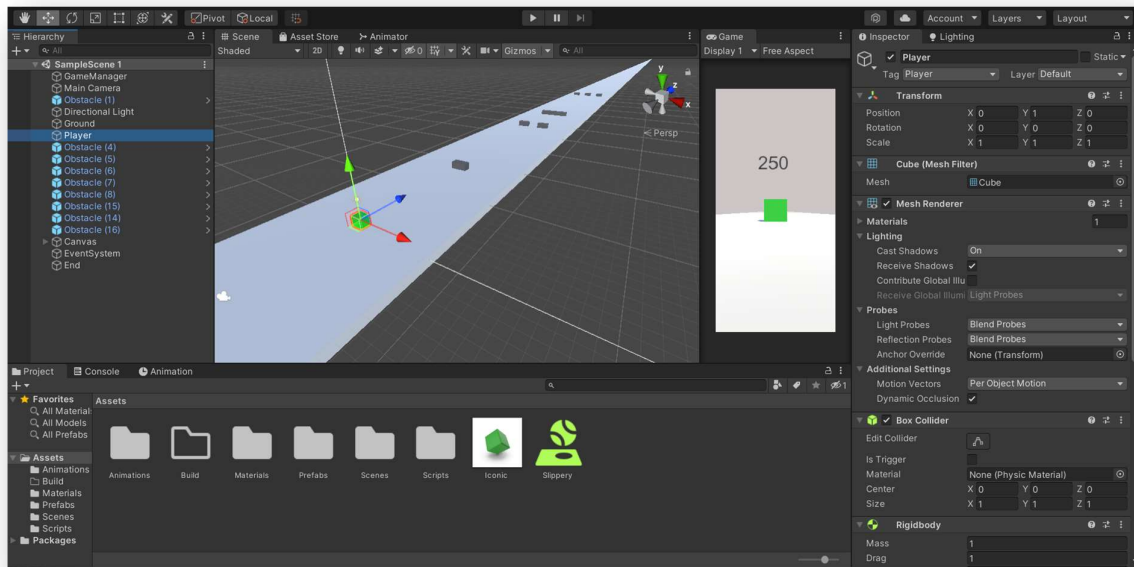
**Fig 5** Level 3 of the game



**Fig 6** Level complete screen of a level



**Fig 7** Game completion screen of the game



**Fig 8** Unity editor screen of the game