

ABSTRACT

Cycling is a sports activity by pedaling. By cycling, can strengthen leg muscles, maintain a healthy body, and burn calories. Now cycling doesn't have to be outdoors, but it can also be done indoors, namely by using a Static Bicycle.

This Static Bicycle is a simple and practical indoor sports equipment. Like an outdoor bicycle that is usually used for cycling by people who have a hobby or have fun in this. However, this Static Bicycle is only used indoors and is specifically for people who do not have time to ride outdoors. Indoor cycling will be a lot of fun if this Static Bike can connect with a racing bike simulation game that will add to the fun itself. Cycling without having to leave the room or house. Creating and designing a bicycle racing game using an assistance application, namely Unity 3D as a designer application, and for designing, using the Event-Driven and Fuzzy methods.

Based on the research results, this game leads to a simulation game which focuses on bicycle races with the Event-Driven and Fuzzy method as a system used in the item box or reward feature when it is obtained by a player or NPC as an additional feature in the game. For the results of testing the game on a laptop using 2 measurement parameters, the average framerate is above 100 FPS with an average response time above 1.0 ms.

Keywords: Unity 3D, Item Box or Reward, Event-Driven and Fuzzy.