INDUSTRY ORIENTED PROJECT

DIGITAL GAME USING HAND GESTURES

Hill climb 2 is a computer game developed by Fingersoft. It is a vehicle game in which the vehicle races through various tracks with different terrains undergoing through different obstacles and challenges. In this game coins are collected and are used to upgrade the vehicle and the terrains. In the game, there is an accelerator and a brake which performs their tasks along with which they are used to maintain or balance the posture of the vehicle.

Hand gesturing in AI refers to movements of hands or giving signals using hand which is an input for the interaction with AI systems. Hand gesturing is performed using CV packages which refers to computer vision packages. CV packages include functionalities like object detection, image

classification, image segmentation, pose estimation, scene understanding etc.

Using these hand gestures , playing of the game becomes more interesting. Actually , the game Hill climb 2 consists of different units/modules which include main screen, players modules, score display module, back- end module, notifications module, level designing etc. Gestures given by the players are detected and the game is played without touching the device. With the help of media pipes ; 21 different hand landmarks are identified using which we can operate the game with hand gestures. In this game, fist is used to apply the break and releasing the fist indicates the acceleration of the vehicle and some other gestures are also used to operate score module, notification module, level designing module etc.