Endless runner (ER) is a game genre where the player controls a constantly running character. The player's enjoyment is closely tied to the difficulty of the game, which makes it an interesting platform for dynamic difficulty adjustment (DDA). DDA is a way of balancing game's difficulty by the use of computer-aided adjusting methods. First, we have developed an endless runner type of game using Unity and utilizing client-server architecture. Second, we have implemented a DDA system using player modeling and genetic algorithms. We have tested the validity of our approach on live users. We were able to adjust the game difficulty to increase player enjoyment and reduce player death rates in levels. This approach can be used in a production environment to improve players' enjoyment of endless runner games.