Abstrak

Penelitian ini bertujuan untuk menganalisis reaksi pola atensi visual pengguna terhadap desain karakter dalam video *game Genshin Impact* menerapkan metode *Eye Tracking* dan *Hierarchical Clustering*. *Eye Tracking* digunakan untuk mengidentifikasi area desain karakter yang paling menarik perhatian pemain, sementara *Hierarchical Clustering* diterapkan untuk mengelompokkan pola perhatian visual berdasarkan kesamaan data yang diperoleh. Data diperoleh dari 60 responden yang belum memiliki pengalaman bermain *Genshin Impact*, dengan rekaman pergerakan mata dikumpulkan melalui situs *gazerecorder.com*. Analisis dilakukan berdasarkan *Region of Interest* (RoI), *heatmaps*, *dwell time*, dan *first view*. Hasil penelitian menunjukkan bahwa bagian tubuh karakter menjadi titik perhatian utama dibandingkan dengan elemen lain seperti kepala, nama, dan atribut karakter. Selain itu, metode *Hierarchical Clustering* dengan pendekatan *Average Linkage* menghasilkan tiga kelompok pola perhatian visual yang berbeda. Temuan ini memberikan wawasan bagi pengembang game dalam merancang karakter yang lebih sesuai dengan preferensi visual pemain serta berkontribusi pada studi interaksi pengguna dalam permainan digital.

Kata Kunci: *Eye Tracking*, *Hierarchical Clustering*, Pola Atensi Visual, *Genshin Impact*, Desain Karakter

Abstract

This research aims to analyze players' visual attention patterns towards character designs in video games *Genshin Impact* using method *Eye Tracking* And *Hierarchical Clustering*. *Eye Tracking* used to identify the areas of character design that most attract the player's attention, while *Hierarchical Clustering* applied to group visual attention patterns based on the similarity of the data obtained. Data was obtained from 60 respondents who had no playing experience *Genshin Impact*, with eye movement recordings collected through the site *gazerecorder.com*. The analysis is carried out based on *Region of Interest* (RoI), *heat maps*, *dwell time*, And *first view*. The research results show that the character's body parts are the main point of attention compared to other elements such as the head, name and character attributes. In addition, method *Hierarchical Clustering* with approach *Average Linkage* produced three distinct groups of visual attention patterns. These findings provide insight for game developers in designing characters that better suit players' visual preferences as well as contribute to the study of user interactions in digital games.

Keywords: *Eye Tracking*, *Hierarchical Clustering*,Visual Attention Patterns, *Genshin Impact*, Character Design