Detection of Habitual Electronic Gaming Through Blink Rate and Staring Time

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The increasing dependence on electronic devices for study, work, and daily activities has raised significant concerns regarding excessive screen exposure and its potential health implications. Many individuals, particularly parents, remain unaware of the associated risks, such as computer Habitual gaming, eye strain, and other vision-related health issues. To address this growing concern, we propose a cost-effective desktop application designed to systematically monitor and analyze screen usage behavior. The application measures two critical ocular parameters: blink rate per minute and staring time per minute. These metrics are evaluated against a dataset of normative eye activity to determine whether the user exhibits indications of computer Habitual gaming, distraction, eye strain, or Norma. The assessment is fully automated and can be conducted using two distinct methodologies. The first approach involves playing our game after entering basic user information such as name and age. The system utilizes the device’s camera to record and analyze eye movement at one-minute intervals, generating fifteen separate readings that are subsequently compared with standard reference values to assess the user’s condition. Alternatively, the application can operate continuously while the user plays games. In this mode, the camera records fifteen separate readings over fifteen minutes, which are then analyzed with age-specific normative data. Instant results are generated, providing immediate feedback on the user’s screen engagement and potential health risks. This solution is an easy-to-access and effective tool to raise awareness of the negative impacts of because it is not just about playing long hours on screen it's a behavioral issue that needs early detection.

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