## Define "SDLC" Explain the steps of SDLC Why is it essential to know about HCI and SDLC when coding applications?

The Software Development Life Cycle (SDLC) offers a structured approach to software development, encompassing distinct phases with specific objectives. It guides the process from planning and design to testing, deployment, and maintenance, ultimately aiming to deliver high-quality software aligned with user and stakeholder needs. Understanding Human-Computer Interaction (HCI) in conjunction with SDLC is crucial in application development. HCI focuses on crafting user-friendly interfaces for an enhanced user experience. By integrating HCI principles, software developed through SDLC becomes more accessible and efficient for end-users, leading to heightened satisfaction and adoption rates. Moreover, factoring in HCI during SDLC enables the early identification and resolution of usability concerns, mitigating the need for costly redesigns later in the development cycle. This synergistic approach, combining both SDLC and HCI principles, forms the bedrock for crafting successful and user-centric applications.