DESIGNING AN INTEGRATED RIDE-HAILING AGGREGATOR APP: A USER-CENTRIC APPROACH

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Summary: The proliferation of ride-hailing services such as Uber, Bolt, and Lyft has revolutionized urban mobility, offering flexible and on-demand transportation options. However, users often face the inconvenience of managing multiple apps to compare prices, wait times, and service availability. To address this challenge, this study developed a ride-hailing aggregator application that consolidates multiple services into a single, user-friendly platform. The app provides comparisons of ride options, enhancing decision-making efficiency and streamlining the user experience.

The research began with a comprehensive market analysis of existing ride-hailing applications to identify key features, user pain points, and gaps in the current ecosystem. A literature review on user behavior and references in digital mobility services provided further insights into usability expectations. Focus groups with potential users were conducted to gather qualitative feedback on desired functionalities, which informed the iterative design and development process. Various prototype versions were created, incorporating best practices in human-computer interaction and user experience design. These prototypes were subsequently tested through usability evaluations, where participants assessed the interface's intuitiveness, efficiency, and overall satisfaction. The final version of the ride-hailing aggregator app successfully integrates multiple service providers, offering users a centralized platform for price and service comparisons. Personalization options, such as preferred ride providers, vehicle types, and payment methods, enhance user convenience.

Pilot testing demonstrated that the app significantly improved user efficiency by reducing the time spent switching between individual ride-hailing applications. Participants reported higher satisfaction levels due to enhanced convenience, better pricing transparency, and the ability to make informed travel decisions. The app also showed potential for optimizing urban mobility patterns by promoting more efficient ride choices, which can contribute to sustainability efforts in the transport sector.

By consolidating ride-hailing services into a single interface, this study provides a novel solution to improve accessibility and user engagement in digital mobility services. The findings offer valuable insights for transportation providers, urban planners, and policymakers interested in enhancing digital mobility ecosystems. The ride-hailing aggregator app serves as a model for future developments in mobility-as-a-service (MaaS) platforms, reinforcing the role of digital innovation in creating more seamless and user-centered urban transport solutions.