

Supplementary Specifications

1. Data Privacy and Compliance

HokieGuide will adhere to FERPA (Family Educational Rights and Privacy Act) compliance, ensuring that all student information is handled according to the regulations governing educational data. The system will not store or share any personally identifiable information (PII) without explicit user consent.

2. System Availability and Reliability

HokieGuide will maintain a 99.9% uptime, ensuring continuous availability for students during critical periods such as course registration, midterms, and finals. Downtime for maintenance or updates will be scheduled during off-peak hours to minimize disruption.

3. Performance

All queries made to HokieGuide should have a response time of less than 2 seconds for academic and financial information requests. This performance standard will be met even under high traffic, such as when hundreds of students access the system simultaneously during registration periods.

4. Accessibility and Usability

HokieGuide will comply with WCAG 2.1 standards to ensure accessibility for all users, including those with disabilities. The interface will support screen readers and include keyboard navigation to enhance usability.

5. Scalability and Flexibility

HokieGuide's infrastructure will be designed to scale dynamically based on user demand. During high-traffic periods, the system will automatically provision additional resources to maintain performance and availability, ensuring a seamless experience for students.

6. Logging and Monitoring

The system will have robust logging and monitoring mechanisms in place to track system performance, identify potential issues, and log significant user interactions while ensuring that no sensitive student information is stored in the logs. Monitoring dashboards will be accessible to developers and administrators for proactive management and troubleshooting.