Hiep Ha

CS-230

Professor Samuel Haney

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2-1 Assignment: Software Design Template

**Executive Summary**

Chat Away is a social media company with a successful website. They want to expand by creating a mobile app for both iPhone and Android users. The goal is to reach more customers while staying within budget by outsourcing the development.

**Business and Technical Requirements**

1. **Business Requirements:**

* Develop a mobile app to reach more customers.
* Ensure the app is available on iPhone and Android.
* Stay within budget by outsourcing the project.

1. **Technical Requirements:**

* The app must work on both iOS and Android.
* Ensure smooth performance and an easy-to-use interface.
* Implement strong security measures to protect user data.

**Design Constraints**

1. **Cross-Platform Development Constraint:**

* Description: The app must work well on both iPhone and Android.
* Rationale: Use a cross-platform framework like React Native or Flutter for efficiency.
* Impact: Limits development tools to those supporting cross-platform. Developers need to know the chosen framework.

1. **Budget Constraint:**

* Description: The project must be outsourced to stay within budget.
* Rationale: Outsourcing is cheaper than in-house development but requires careful vendor selection.
* Impact: Limits vendor choices and may require trade-offs in features or timeline.

1. **Security and Privacy Constraint:**

* Description: Implement strong security measures to protect user data.
* Rationale: User trust and regulatory compliance are crucial.
* Impact: Requires encryption, secure authentication, and security audits, adding complexity and time to development.

**Software Design Template**

**Executive Summary**

Client: Chat Away

Chat Away is developing a mobile app to expand its reach and increase revenue by making the app available on both iPhone and Android. The project will be outsourced to stay within budget.

**Business Requirements:**

* Expand customer base with a mobile app.
* Ensure availability on iPhone and Android.
* Maintain budget through outsourcing.

**Technical Requirements:**

* Compatibility with iOS and Android.
* Smooth performance and user-friendly interface.
* Strong security for user data.

**Design Constraints**

**Cross-Platform Development Constraint:**

* Description: The app must work well on both iPhone and Android.
* Rationale: Use cross-platform framework for efficiency.
* Impact: Limits development tools. Requires developer proficiency.

**Budget Constraint:**

* Description: Project must be outsourced to stay within budget.
* Rationale: Outsourcing reduces costs but requires careful vendor selection.
* Impact: Limits vendor choices and may require trade-offs.

**Security and Privacy Constraint:**

* Description: Implement strong security measures to protect user data.
* Rationale: Essential for user trust and compliance.
* Impact: Requires encryption, secure authentication, and audits. Adds complexity and time.