PASTA worksheet

Stages	Sneaker company
I. Define business and security objectives	Make **2-3 notes** of specific business requirements that will be analyzed. ● *The app should seamlessly connect sellers and shoppers, allowing buyers to message sellers directly.* ● *Must have easy and simple interface for sign-up, log in, and manage their accounts* ● *The app will process transactions and will need to offer several payment options for a smooth checkout process.* ● *The app should be in compliance with PCI-DSS.*
II. Define the technical scope	List of technologies used by the application: ● *API* ● *PKI* ● *AES* ● *SHA-256* ● *SQL* Write **2-3 sentences** (40-60 words) that describe why you choose to prioritize that technology over the others. One of the main technologies used is API, which are commonly used to add functionality without having to program it from scratch. API technology is vital for in an e-commerce platforms like this as it enables secure data transmission, authentication, and authorization, preventing unauthorized access to sensitive customer information. It also helps mitigate threats like DDoS attacks, SQL injection, and XSS by enforcing encryption, rate limiting, and strict access controls.
III. Decompose application	Sample data flow diagram
IV. Threat analysis	List **2 types of threats** in the PASTA worksheet that are risks to the information being handled by the application. ● *SQL Injection*

	● *Session hijacking*
V. Vulnerability analysis	List **2 vulnerabilities** in the PASTA worksheet that could be exploited. ● *Lack of prepared statements* ● *Broken API token*
VI. Attack modeling	Sample attack tree diagram
VII. Risk analysis and impact	List **4 security controls** that you've learned about that can reduce risk. • Strong password policy • Principle of least privilege • Hashing with SHA-256 • Incident response procedures

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