

PASTA worksheet

Stages	Sneaker company
I. Define business and security objectives	<p>Make 2-3 notes of specific business requirements that will be analyzed.</p> <ul style="list-style-type: none"> • <i>Will the app process transactions?</i> • <i>Does it do a lot of back-end processing?</i> • <i>Are there industry regulations that need to be considered?</i> <p><i>The app being developed will definitely process transactions. It seems that digital and physical methods will be used to be able to purchase goods. I think there will be back-end processing, especially if a customer is purchasing through digital means requiring them to use their credit card. There are regulations that will need to be considered. In such a way that the customer's data does not get accessed by anyone else including information about their finances.</i></p>
II. Define the technical scope	<p>List of technologies used by the application:</p> <ul style="list-style-type: none"> • <i>Application programming interface (API)</i> • <i>Public key infrastructure (PKI)</i> • <i>SHA-256</i> • <i>SQL</i> <p><i>I would prioritize PKI because they need to keep the customer's information confidential. Only those who need to see or access should be allowed to. Prioritizing it means they can build a better system to hide and keep customer's data from potential attackers that want to steal information. Encrypting sensitive data so it would become harder if said attacker does infiltrate through the system.</i></p> <p>Write 2-3 sentences (40-60 words) that describe why you choose to prioritize that technology over the others.</p>
III. Decompose application	Sample data flow diagram
IV. Threat analysis	List 2 types of threats in the PASTA worksheet that are risks to

	<p>the information being handled by the application.</p> <ul style="list-style-type: none"> • <i>An internal threat would be the employees that handle the data. They can have malicious intentions and/or steal the customer's data. The usage of least privilege should be applied here as well as separation of duty.</i> • <i>External threats would be actors that have intentions to steal customer's data. They can utilize injection attacks on the app,</i>
V. Vulnerability analysis	<p>List 2 vulnerabilities in the PASTA worksheet that could be exploited.</p> <ul style="list-style-type: none"> • <i>Web-based exploit</i> • <i>injection</i>
VI. Attack modeling	Sample attack tree diagram
VII. Risk analysis and impact	<p>List 4 security controls that you've learned about that can reduce risk.</p> <ul style="list-style-type: none"> • SHA-256 • Password policy • Incident response procedures • Least privilege
