

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>The app has to be able to accept various types of payment</i>• <i>It has to do little backend processing and has to be quick</i>• <i>The app should be in compliance with PCI-DSS.</i>
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>We will be using API technologies to add functionalities that are already programmed and been tested so that we don't have to do it from scratch, PKI to ensure that the information is being transported safely and SHA-256 because if there happens to be a data breach, the data wouldn't be readable. And SQL will help us store large databases, and be able to interact with them.</p>
III. Decompose application	<u>Sample data flow diagram</u>
IV. Threat analysis	<p>List 2 types of threats in the PASTA worksheet that are risks to the information being handled by the application.</p> <ul style="list-style-type: none">• <i>Social engineering</i>• <i>Malicious hacker's virus</i>
V. Vulnerability analysis	<p>List 2 vulnerabilities in the PASTA worksheet that could be exploited.</p> <ul style="list-style-type: none">• <i>Session hijacking</i>• <i>SQL injection</i>
VI. Attack modeling	<p>If we don't have prepared statements we are vulnerable to SQL injection, that could lead to a data breach.</p> <p>Having weak login credentials could end in a session hijacking, with problems like stolen PII and SPII, identity theft or even a</p>

	ransomware attack
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">• Prepared statements• MFA• Password policies• Well configured firewalls
