

PASTA worksheet

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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 processes transactions.</i>• <i>It does a lot of back-end processing with customer credentials.</i>• <i>Industry regulations such as GDPR and PCI DSS should be considered for this app.</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>Write 2-3 sentences (40-60 words) that describe why you choose to prioritize that technology over the others. I would check the API and SQL implementation. These are points where an attack is mostly likely going to happen.</p>
III. Decompose application	Sample data flow diagram
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>Internal threats can be employees that mishandle information or can be victim to social engineering.</i>• <i>External threats can be unauthorized hackers that want credentials for financial gain.</i>
V. Vulnerability analysis	<p>List 2 vulnerabilities in the PASTA worksheet that could be exploited.</p> <ul style="list-style-type: none">• <i>In the codebase, there could be a lack of input sanitization and error checking.</i>• <i>Yes, SQL injections can happen very often if the database is not protected.</i>• <i>If endpoints aren't configured with proper firewalls,</i>

	<i>intruders can enter the network easily.</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"> - Error checking on code inputs - Securing APIs and making sure secret keys are kept hidden - Using prepared statement for SQL queries - MFA for users on the platform when logging in to make purchases.
