

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? Y</i> <ul style="list-style-type: none"> ◦ <i>Yes, the app is to buy and sell shoes</i> • <i>Does it do a lot of back-end processing?</i> <ul style="list-style-type: none"> ◦ <i>Yes, there are many different backend processes such as logins, sign up, manage account, and messaging systems which all relate to a database.</i> • <i>Are there industry regulations that need to be considered?</i> <ul style="list-style-type: none"> ◦ <i>We will need to protect sensitive information according to any guidelines and frameworks.</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.</p> <p>I would look at SQL as that is vulnerable to a SQL injection. SHA-256 & PKI is just encryption and is pretty secure.</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>What are the internal threats?</i> • <i>What are the external threats?</i> <p><i>2 threats could be SQL injection and session hijacking. Internal threats are threats from the inside such as a grunted employee and external threats are from foreign actors such as someone</i></p>

	<i>attacking through a network.</i>
V. Vulnerability analysis	<p>List 2 vulnerabilities in the PASTA worksheet that could be exploited.</p> <ul style="list-style-type: none"> • <i>Could there be things wrong with the codebase?</i> • <i>Could there be weaknesses in the database?</i> • <i>Could there be flaws in the network?</i> <p><i>The code can be written wrong which allows an attacker to exploit it with Javascript, HTML or a weakness in a SQL database.</i></p>
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> <p>Being proactive about risks, using encryption, working with the programming team to make sure threats, risks, vulnerabilities are patched and secured in the right way.</p>
