

PASTA worksheet

Scenario

You're part of the growing security team at a company for sneaker enthusiasts and collectors. The business is preparing to launch a mobile app that makes it easy for their customers to buy and sell shoes.

You are performing a threat model of the application using the PASTA framework. You will go through each of the seven stages of the framework to identify security requirements for the new sneaker company app.

Stages	Sneaker company
I. Define business and security objectives	The business wants to create an application that connects sellers and customers. Both parties will need to communicate with each other. The app should also incorporate multiple payment options. The business needs to make sure customers PII and SPII is secure. Since they will be processing transactions, they need to consider payment industry regulations.
II. Define the technical scope	List of technologies used by the application: <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> The first technology I would evaluate is APIs because this will be used during the exchange of information between users and the app.
III. Decompose application	Sample data flow diagram
IV. Threat analysis	<ul style="list-style-type: none">• Injection• Session Hijack

V. Vulnerability analysis	<ul style="list-style-type: none">• No prepared Statements• Broken API token
VI. Attack modeling	Sample attack tree diagram
VII. Risk analysis and impact	Implementing a password policy, MFA, Principle of Least Privilege
