

PASTA worksheet

Stages	Sneaker company
I. Define business and security objectives	<ul style="list-style-type: none">• Users can create member profiles internally or by connecting external accounts.• The application must process financial transactions.• The application must comply with the Payment Card Industry Data Security Standard (PCI-DSS).
II. Define the technical scope	<p>List of technologies used by the application:</p> <ul style="list-style-type: none">• <i>Application Programming Interfaces (APIs)</i>• <i>Public Key Infrastructure (PKI)</i>• <i>Advanced Encryption System (AES)</i>• <i>SHA-256</i>• <i>SQL</i> <p><i>APIs facilitate data exchange between clients, partners, and employees, so they should be prioritized. They handle a large amount of sensitive data by connecting various users and systems. Before prioritizing one technology over another, details such as which APIs are being used should be considered because, as the attack surface increases, they may be more prone to security vulnerabilities.</i></p>
III. Decompose application	Sample data flow diagram
IV. Threat analysis	<ul style="list-style-type: none">• Injection• Session Hijacking
V. Vulnerability analysis	<ul style="list-style-type: none">• Lack of prepared statements• Broken API token
VI. Attack modeling	Sample attack tree diagram
VII. Risk analysis and impact	SHA-256, incident response procedures, password policy, principle of least privilege
