PASTA worksheet

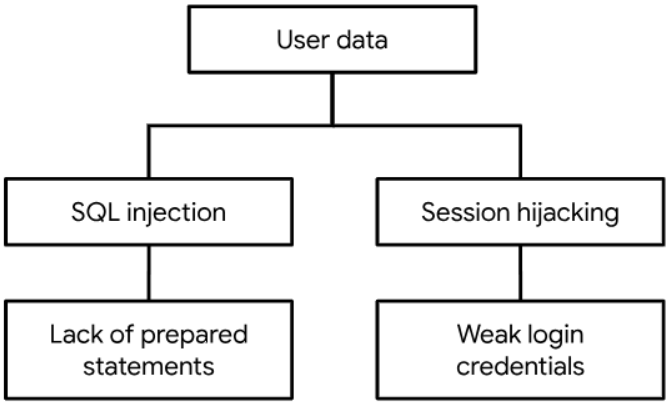
Scenario

Review the following scenario. Then complete the step-by-step instructions.

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	● *Enable users to create member profiles using internal registration or by connecting external accounts to enhance user experience and convenience.* ● *Develop an app that securely processes financial transactions to facilitate seamless buying and selling of shoes.* ● *Ensure the app is in compliance with the Payment Card Industry Data Security Standard (PCI-DSS) to safeguard customer payment card data and maintain trust in the platform.*
II. Define the technical scope	● *Application Programming Interfaces (APIs)* ● *Public Key Infrastructure (PKI)* ● *Advanced Encryption System (AES)* ● *SHA-256* ● *SQL*
III. Decompose application	Sample data flow diagram

IV. Threat analysis	● *Injection* ● *Session hijacking*
V. Vulnerability analysis	● *Lack of prepared statements* ● *Broken API token*
VI. Attack modeling	
VII. Risk analysis and impact	• *SHA-256* • *Incident response procedures* • *Password policy* • *Principle of least privilege*