PASTA worksheet

Stages	Sneaker company
I. Define business and security objectives	Make **2-3 notes** of specific business requirements that will be analyzed. ● *Will the app process transactions?* ● *Does it do a lot of back-end processing?* ● *Are there industry regulations that need to be considered?* ● The app will process transactions, with many payment options available for customer ease ● There is a lot of back-end processing regarding accounts, messaging, and the rating system ● Proper payment handling is really important because the company wants to avoid legal issues
II. Define the technical scope	List of technologies used by the application: ● *Application programming interface (API)* ● *Public key infrastructure (PKI)* ● *SHA-256* ● *SQL* Write **2-3 sentences** (40-60 words) that describe why you choose to prioritize that technology over the others. I would prioritize SQL first, as it is used to access databases with SPII such as customers' login credentials. If not properly secured, the database could be breached via SQL injection, and result in the loss of sensitive information.
III. Decompose application	Sample data flow diagram

IV. Threat analysis	List **2 types of threats** in the PASTA worksheet that are risks to the information being handled by the application. ● *What are the internal threats?* ● *What are the external threats?* ● Employee with too much access ● SQL injection
V. Vulnerability analysis	List **2 vulnerabilities** in the PASTA worksheet that could be exploited. ● *Could there be things wrong with the codebase?* ● *Could there be weaknesses in the database?* ● *Could there be flaws in the network?* ● Lack of input sanitization ● Lack of password policies
VI. Attack modeling	Sample attack tree diagram
VII. Risk analysis and impact	List **4 security controls** that you've learned about that can reduce risk. ● Sanitize input ● Prepared statements ● Encrypt data ● Password policies