PASTA worksheet

Stages	Sneaker company
I. Define business and security objectives	Make **2-3 notes** of specific business requirements that will be analyzed. ● *Proper payment handling* ● *Multiple payment options* ● *Data privacy* ● *Easy user account handling*
II. Define the technical scope	List of technologies used by the application: ● *Application programming interface (API)* ● *Public key infrastructure (PKI)* ● *SHA-256* ● *SQL* SQL should be the first technology to be looked at, as it is the one that might be targeted first, or the most vulnerable. Threat actors usually have a motive to obtain sensitive information or obtain administrative rights, and if they are able to exploit SQL, they can obtain sensitive user data.
III. Decompose application	When a user submits a search for a product, it sends a query to the SQL database, that query is then sent to the database which will give the user a listing of that current products inventory.
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?* ○ *Unsafe handling of user data* ● *What are the external threats?* ○ *Session hijacking*
V. Vulnerability analysis	List **2 vulnerabilities** in the PASTA worksheet that could be exploited. ● *Lack of input validation on user input* ● *Improper payment encryption*

VI. Attack modeling	Threat actors can exploit a lack of prepared statements in the SQL database, which can lead to SQL injection, or take advantage of weak user login credentials, which can lead to session hijacking.
VII. Risk analysis and impact	• Encryption • Authentication • Authorization • IDS
