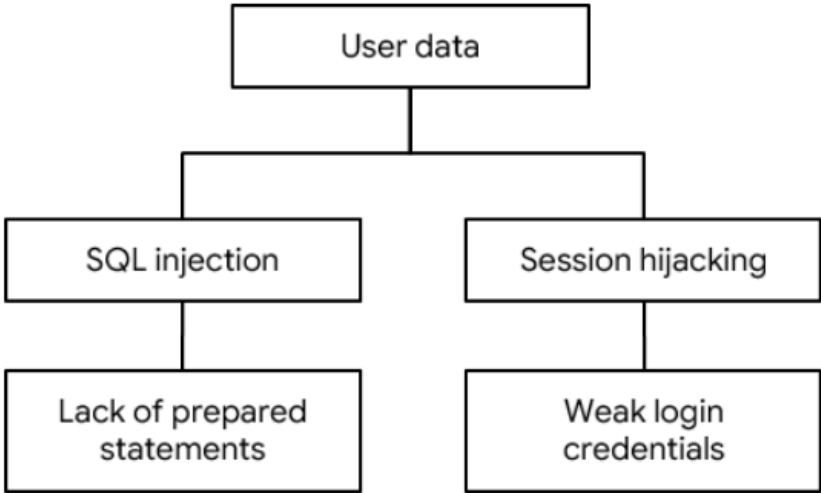


PASTA worksheet

| Stages | Sneaker company |
|---|---|
| I. Define business and security objectives | <p>The app will process financial transactions.</p> <p>Users can create new accounts utilizing the application or sign up with other organizations service, like google, because is the most used one.</p> <p>The app must have an online payment secure process, like the PCI-DSS.</p> |
| II. Define the technical scope | <p>List of technologies used by the application:</p> <ul style="list-style-type: none">● API (Application programming interface)● PKI (Public key infrastructure)● AES (Advanced encryption standard)● SHA-256● SQL <p>I would first prioritize the AES so the customers' data will be safe without a doubt. In this way we make sure that all the data about users and customers is kept safe from externals or internals attacks.</p> |
| III. Decompose application | <p>The user search for a object to buy, than there is an research into the database checking all of the current objects currently available, for last the list will be sent back to the application and then to the user.</p> |
| IV. Threat analysis | <ul style="list-style-type: none">● SQL injection● Utilize cookies to gain access to user information(hijacking) |
| V. Vulnerability analysis | <p>Insecure randomness can be caused by writing a code using statistical PRNG to creating a URL.</p> <p>Password management hardcoded password.</p> <p>Broken API code.</p> |

| | |
|--------------------------------------|---|
| VI. Attack modeling |  <pre>graph TD; A[User data] --> B[SQL injection]; A --> C[Session hijacking]; B --> D[Lack of prepared statements]; C --> E[Weak login credentials];</pre> |
| VII. Risk analysis and impact | SHA-256, least privilege, password policies in the organization and incident response procedures. |
