## 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 financial transactions through multiple platforms. The app will need to access many resources on the back-end. The app should comply with PCI DSS. |
| **II. Define the technical scope** | List oftechnologies used by the application:   * *API* * *PKI* * *AES* * *SHA-256* * *SQL*   Write **2-3 sentences** (40-60 words) that describe why you choose to prioritize that technology over the others.  It is recommended to evaluate SQL first. SQL will provide the ability to read and manipulate the data. APIs should also be prioritized because they connect users and systems and facilitate the exchange of sensitive data. These technologies must function correctly and securely first otherwise the other technologies are largely meaningless. |
| **III. Decompose application** | [Sample data flow diagram](https://docs.google.com/presentation/d/1ol7y79popTFfNHM-90ES-H-i1Lpd0YNvPShxBlXozjg/template/preview?resourcekey=0-DZAkf7Vzh2PXsP-j3oXV-g) |
| **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?*   Injection attacks.  Session hijacking. |
| **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 prepared statements.  Incorrectly configured software. |
| **VI. Attack modeling** | [Sample attack tree diagram](https://docs.google.com/presentation/d/1FmWLyHgmq9XQoVuMxOym2PHO8IuedCkan4moYnI-EJ0/template/preview?usp=sharing&resourcekey=0-zYPY7AhPJdcClXamlAfOag) |
| **VII. Risk analysis and impact** | List **4 security controls** that you’ve learned about that can reduce risk.  Principle of least privilege, incident playbooks, user password policies that comply with standards, encryption of user data. |