## PASTA worksheet

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| **Stages** | **Sneaker company** |
| **I. Define business and security objectives** | * *Will the app process transactions?* * *Does it do a lot of back-end processing?* * *Are there industry regulations that need to be considered?*   + *Users can create member profiles internally or by connecting external accounts.*   + *The app must process financial transactions.*   + *The app should be in compliance with PCI-DSS.* |
| **II. Define the technical scope** | List oftechnologies used by the application:   * *API* * *PKI* * *AES* * *SHA-256* * *SQL*   *APIs facilitate the exchange of data between customers, partners, and employees, so they should be prioritized. They handle a lot of sensitive data while they connect various users and systems together. However, details such as which APIs are being used should be considered before prioritizing one technology over another. So, they can be more prone to security vulnerabilities because there’s a larger attack surface.* |
| **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*   + *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*   + *Broken API token* |
| **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.  *SHA-256, incident response procedures, password policy, principle of least privilege* |