## PASTA worksheet

|  |  |
| --- | --- |
| **Stages** | **Sneaker company** |
| **I. Define business and security objectives** | *The app must support multiple payment options, including credit cards, to enable seamless and secure transactions for users.*  *The app requires extensive back-end processing capabilities to handle various features and provide a smooth user experience.*  *The development process must adhere to industry regulations and best practices to ensure proper handling, usage, and secure storage of customers' payment and personal information, maintaining data privacy and security, for example PCI-DSS.* |
| **II. Define the technical scope** | List oftechnologies used by the application:   * *API* * *PKI* * *AES* * *SHA-256* * *SQL*   The priority of using the API technology lies in its ability to facilitate seamless communication and data exchange between the application and other external systems, promoting scalability and integration. Additionally, PKI (Public Key Infrastructure) is chosen for its robust encryption and authentication capabilities, ensuring the secure transmission of sensitive data and maintaining data integrity. AES (Advanced Encryption Standard) and SHA-256 are prioritized for their strong encryption and hashing algorithms, enhancing the overall security of the application's data storage and communication. |
| **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** | * Injection * Session hijacking |
| **V. Vulnerability analysis** | * 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** | SHA-256, incident response procedures, password policy,  principle of least privilege will reduces the risks. |