# PASTA worksheet

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| Stages | Sneaker company |
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| **I. Define business and security objectives** | Make **2-3 notes** of specific business requirements that will be analyzed.<br><br>● *The application should seamlessly connect sellers and shoppers*<br>● *The app must process financial transactions*<br>● *The app should be in compliance with PCI-DSS* |
| **II. Define the technical scope** | List of technologies used by the application:<br>● *Application programming interface (API)*<br>● *Public key infrastructure (PKI)*<br>● *SHA-256*<br>● *SQL*<br><br>Write **2-3 sentences** (40-60 words) that describe why you choose to prioritize that technology over the others.<br><br>The technology that should be prioritised is SQL. SQL is vulnerable to injection attack. SQL should be addressed as soon as possible to avoid unwanted queries as the database stores the usernames and passwords of users. |
| **III. Decompose application** | Sample data flow diagram |
| **IV. Threat analysis** | List **2 types of threats** in the PASTA worksheet that are risks to the information being handled by the application.<br><br>● *SQL injection attack*<br>● *Session hijacking as the app communicates cookies between multiple layers* |
| **V. Vulnerability analysis** | List **2 vulnerabilities** in the PASTA worksheet that could be exploited.<br><br>● *Broken API token* |

| | ● *Not using prepared statements* |
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| **VI. Attack modeling** | [Sample attack tree diagram](#) |
| **VII. Risk analysis and impact** | List **4 security controls** that you've learned about that can reduce risk.<br><br>● Using prepared statements<br>● Hashing username and passwords and salting<br>● Password policy<br>● Token-based authentication |