

Design Plan

By Arenco Meevissen



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**Revision Table**

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Date | Author | change(s) |
| 1.0 | 13/9/2022 | Arenco Meevissen | Initial document |
| 1.1 | 7/10/2022 | Arenco Meevissen | Added context to c4 and added High level architecture |

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# 1 Introduction

This document shows the designs for the structure of the Class diagram, entity diagram for the database and the expected web designs for this project

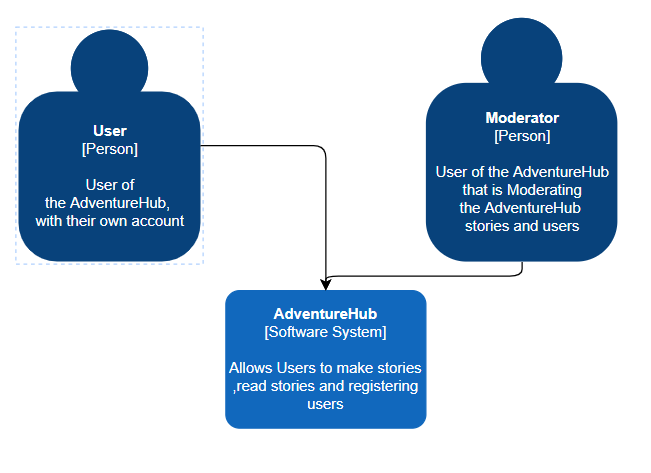
# 2 Class Diagram

t.b.a

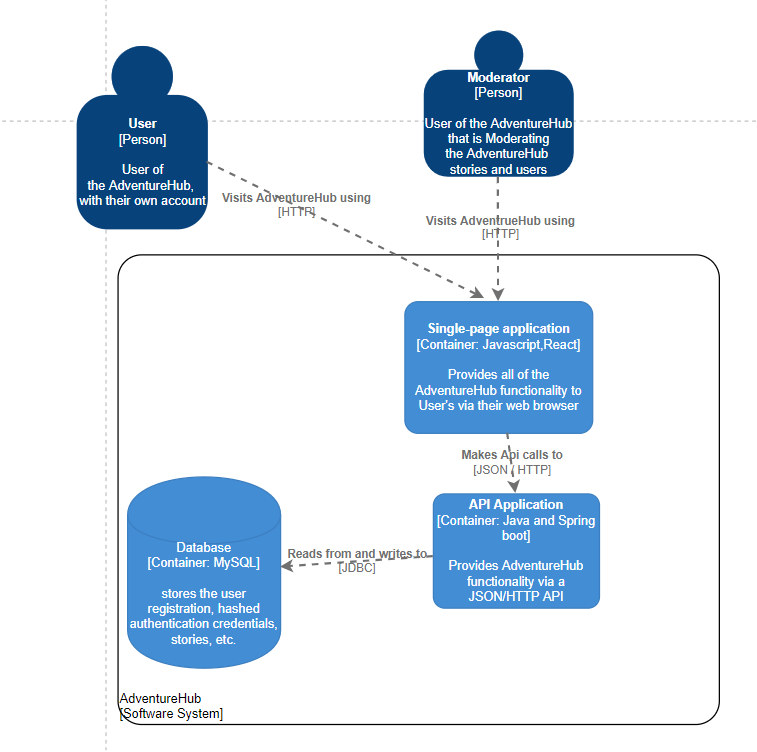
# 3 C4 Diagram

The use of Java is because of its cross-platform support and Type safety (Hartman, 2022) that java enforcers which helps with prevention of illegal operations and memory safety. (Wikipedia contributors, 2022), (Srivastava, 2022)  
The spring boot is used because it provides powerful batch processing capabilities compared to Spring MVC, it also has an auto-configuration feature that some others lack like Spring MVC. (Difference Between Spring MVC and Spring Boot, 2022)  
  
React is used for its code reusability, the fast community that it has and the huge number of libraries that it has. It also is more flexible compared to Vue.js (which is also a JavaScript framework). (Patel, 2022 and Yusov, 2020)  
  
The MySQL Database I chose because of the data model that it uses which is a relational database, the support of SQL and that Java is one of its supported languages and its simple syntax. It also works well with systems like Windows, Linux, MacOS land others. (Editor, 2019), (Wikipedia contributors, 2022b), (MySQL System Properties, n.d.)

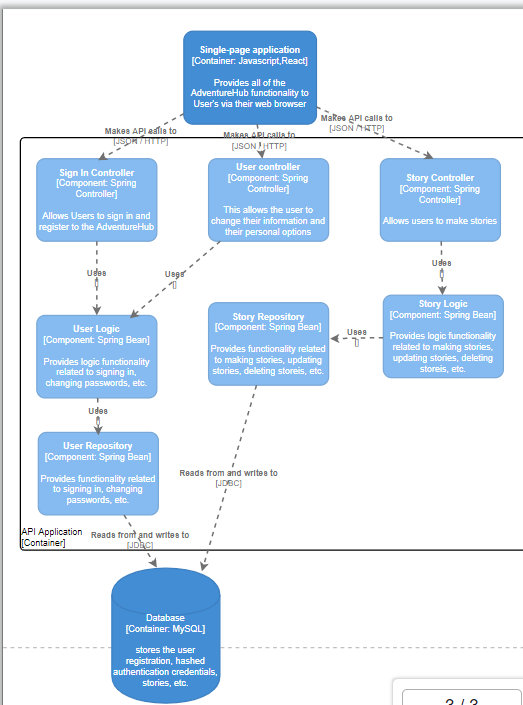
## 5.1 C4 level 1 system context (system, users, dependencies)



## 5.2 C4 level 2 Containers (overall shape technologies choices)



## 5.3 C4 level 3 Components (components and their interaction)



## 5.4 C4 level 4 Code (Implementation details)

# References

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