



JANUARY 1, 2023

RISK ANALYSIS

SCRIMFINDER

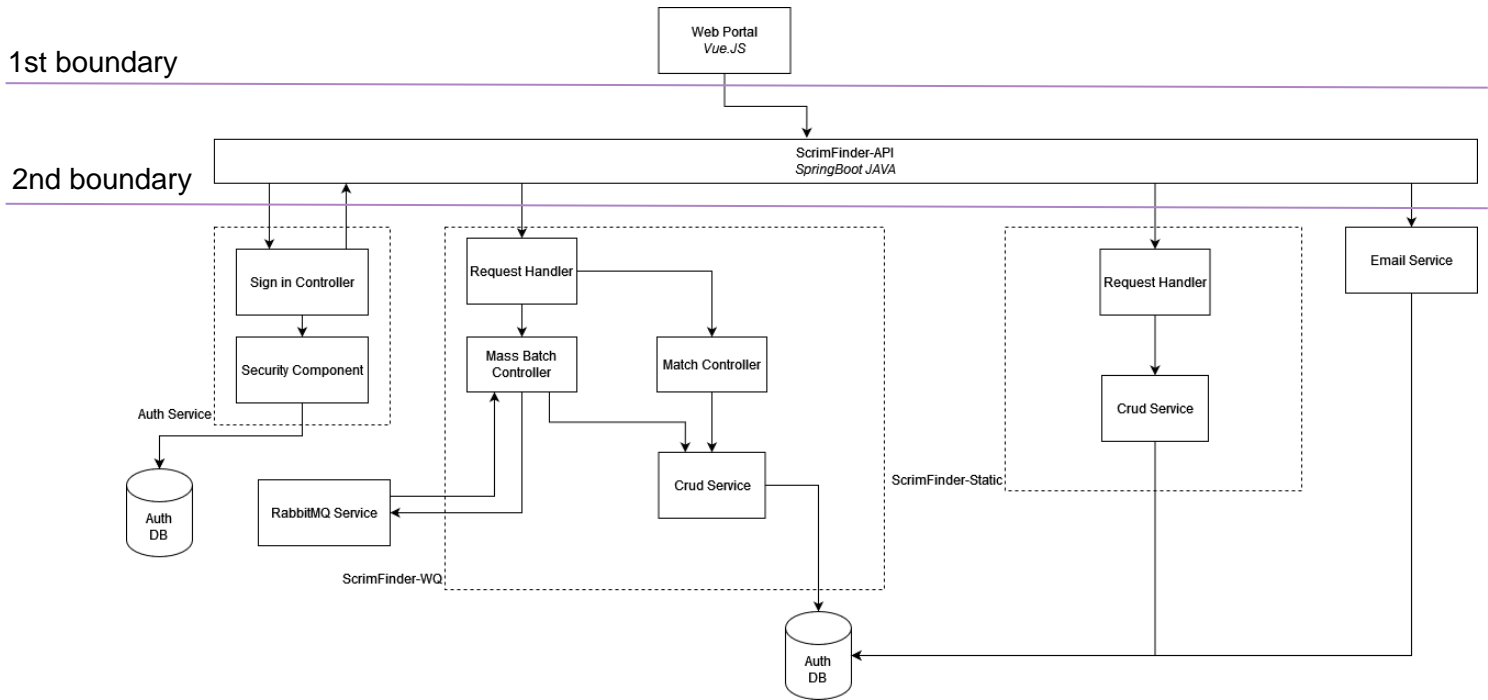
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1. TRUST BOUNDARY

Trust Boundary or Boundary Crossing is a way of describing where data and scripting changes its level of trust. Trust meaning level of privilege or the uncertainty of an action within the system. Examples are user input or pulling from an un-verified API but might also describe parts where an execution gets more privilege to the system, think of access to root.



The first boundary in ScrimFinder is set at the frontend, like many other web applications ScrimFinder makes use of user input to create, delete and get different data points. To secure this boundary we can implement our own security features but most if not, all will be handled by Vue.JS tested security protection. To harbour these protections SonarCloud will be used to find potential vulnerabilities.

The second trust boundary defines access to the database. The main ScrimFinder-API has two purposes: monitor, log and observe the application and secure the and verify incoming data. After crossing the 2nd boundary API's and data can be stored within the database.

2. MISUSE CASES

Opposite of use cases, misuse cases are meant to find potential malicious outcomes with a system and finding ways to reroute, mitigate or prevent these cases. ScrimFinder has three main goals:

1. Connect clubs.
2. Create tournaments / matches.
3. Manage tournaments / matches.

2.1 CASES

Misuse case 1:

Summary	A club creates an account with false information.
Path	Create an account, provide wrong information.
Triggers	When creating a match, the second team might be put in jeopardy either through unsafe travel or extra costs due to faulty information.
Mitigation	Collaboration with KNZB regarding club information, set up verification team, don't allow for sign up and only use invitations

Misuse case 2:

Summary	Tournament are created but not all teams are given the same number of matches or opportunities by the tournament creator.
Path	Create a tournament, create matches with some teams receiving an advantage.
Triggers	Puts fair play in jeopardy
Mitigation	Tournament can only be created using the automated tool after a group of verified teams has been added to it.

Misuse case 2:

Summary	Teams don't give correct match results
Path	Match has been played, 1 team provides score, score is not correct
Triggers	Puts fair play in jeopardy
Mitigation	Both teams and the referee need to verify the score of the match.

4. ROLES AND CREDENTIALS

Within the chapter we will define which role has which authorization to the main use cases that are defined within ScrimFinder. There is also a fifth role Administrator, but this role is reserved for quick edits or when immediate change is required. This role has access to the whole system and is there as a safeguard for exception cases.

Access	Club	Team	Referee	Player
Create Club				
Create Team				
Create Tournament				
Create Matches				
Assign Team Head				
Assign Team Coach				
Assign Tournament Organizer				
Verify Match Results				
Manage Match Data				
Manage Match Information				
View Player Profile				
View Team Profile				
View Club Profile				
View Referee Profile				
View Tournament				
View Match				