Research report  
Keycloak

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**Afbeelding met schermopname, Graphics, Lettertype, logo

Automatisch gegenereerde beschrijving**

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# **Introduction**

## Problem description

In today's digital world, keeping online information secure is crucial. Businesses and organizations need effective tools to manage who can access their apps and data, ensuring only the right people get in while keeping everything safe. This challenge calls for Identity and Access Management (IAM) solutions.

Keycloak, an open-source IAM tool, steps in to help solve these challenges. The problem we're tackling is how to handle user identities, control who can access what, and make sure everything stays secure in modern apps. Without a good IAM system, there's a risk of security issues, not meeting compliance standards, and a lack of control over who gets to use what.

The main purpose of this research report is to understand its features and how well it can handle identity and access management. My goal is to implement in my personal project: “GamifyWork” and to determine for which project(s) it could be suitable.

## Main question

How can Keycloak be seamlessly integrated into 'GamifyWork' for efficient identity and access management?

## Sub questions

1. What is IAM and how does Keycloak play a part in it?
   1. **Literature study:** Searching for academic papers, articles, and blog posts that discuss about Keycloak and other IAM’s.
   2. **Community research:** Engage with online communities, forums, and social media groups dedicated to each of these frameworks. Observe discussions, queries, and the level of activity within these communities. Take note of the number of members, frequency of posts, and responsiveness to inquiries.
   3. **Expert interview:** Conduct interviews with an expert in the field of Identity and   
      Access Management (IAM) and Keycloak.
2. How easily can Keycloak integrate with the specific features of GamifyWork.
   1. **Best good and bad practices:** Research and compile a list of best practices for Keycloak. These practices should highlight effective ways to extend or modify the behaviour of Keycloak while avoiding common pitfalls.
   2. **Observation:** Observe and analyse real-world applications or projects built using Keycloak. Pay attention to how developers have customized it to meet specific requirements.
3. To what extent does Keycloak allow for customization of the user interface, and how can this be leveraged to align with the branding of "GamifyWork"?
   1. **Prototyping:** Develop a demonstration prototype showcasing the potential customization capabilities of Keycloak's user interface in alignment with the branding of "GamifyWork."
   2. **Usability testing:** Gather feedback on the prototype through usability testing sessions with stakeholders and potential users.

# **Results**

## Sub question 1

## Sub question 2

## Sub question 3

## Sub question 4

# **Resolution**

## Conclusion

## Recommendation

# **References**

# **Version History**

|  |  |
| --- | --- |
| **When?** | **What?** |
| 10/11/2023 | First start, initialized it. |
| 30/11/2023 | Main- and sub questions with the specific methods. |