UNIVERSITY OF LATVIA
FACULTY OF COMPUTING

Open-Source Software Database (OSSDB)

Databases and Information Systems Fundamentals

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1. Introduction

Open-source software has grown in popularity over the years due to its collaboration, innovation, and cost savings benefits. Typically, open-source software is created and maintained by a community of developers who work together to improve their projects, share experiences and contribute to their growth. As a result, there are now dozens of open source projects covering everything from software development to data science, robotics and more.

However, it can be difficult to keep track of all the open source projects available. Project leaders and maintainers often struggle to find contributors to help build projects, while contributors struggle to find projects that match their interests and expertise. This is where the Open-Source Software Database (OSSDB) comes into play.

The OSSDB is a comprehensive online platform that acts as a central repository for tracking and managing open source projects. This database provides project listings, search capabilities, filters, user profiles, etc. to help contributors find projects to contribute to. and for project leads and maintainers to find contributors to help build the project. The OSSDB aims to provide a platform that fosters collaboration, transparency and innovation in the open-source software community.

The OSSDB itself will be an open source project, and as such will be free and accessible to everyone. This approach is in line with the open source philosophy, which encourages collaboration, transparency and community-driven innovation. This project aims to encourage more people to get involved in open source projects and contribute to the growth of the community. The project will rely on contributions and feedback from the community to continuously improve and refine the OSSDB.

2. Features

The platform will offer project listings that include descriptions, contributors (username, email, and password), license types, code hosting platforms, programming languages, and project types. Users will be able to easily locate projects using the search and filter functionality that will allow them to search by name, keyword, programming language, project type, license type, and contributor.

The OSSDB intends to implement several features in the long term to improve the platform's functionality and user experience. There features include notifications, a review and rating system and a dedicated website.

Users will be able to receive notifications when other users are looking to collaborate on a project to which they are interested in or have contributed to. This will allow users to connect with other developers who share their interests, fostering collaboration and innovation in the open-source software community.

The rating and reviewing feature will allow users to give feedback and rate the projects they have used or contributed to. This will help other users make informed decisions about which projects to use and contribute to, based on the experiences of other users.

Finally, there are plans to create a dedicated website for the platform, which will act as a central hub for discovering open-source software projects.