# Proposal for OSPP 2022

KubeEye Console 2.0 front-end page development

## Project Abstract

1. Restore the plugin list page and detail page with TS, React stack and KubeDesign component library.
2. Use Ajax call interface to implement plug-in installation, uninstall, start, stop, and monitor the status of the plug-in through websocket.

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## Project Overview

### Description

KubeEye is designed to find various issues on Kubernetes, such as application misconfiguration (using OPA), cluster component unhealthy, and Node issues (using Node-problem-Detector). In addition to predefined rules, it also supports custom rules.

KubeEye2.0 supports the extension of monitoring rules in a plug-in form. This project is the development of KubeEye plug-in management front-end interface. The main content includes plug-in list page, detail page development, plug-in installation, uninstall, start, stop and other functions.

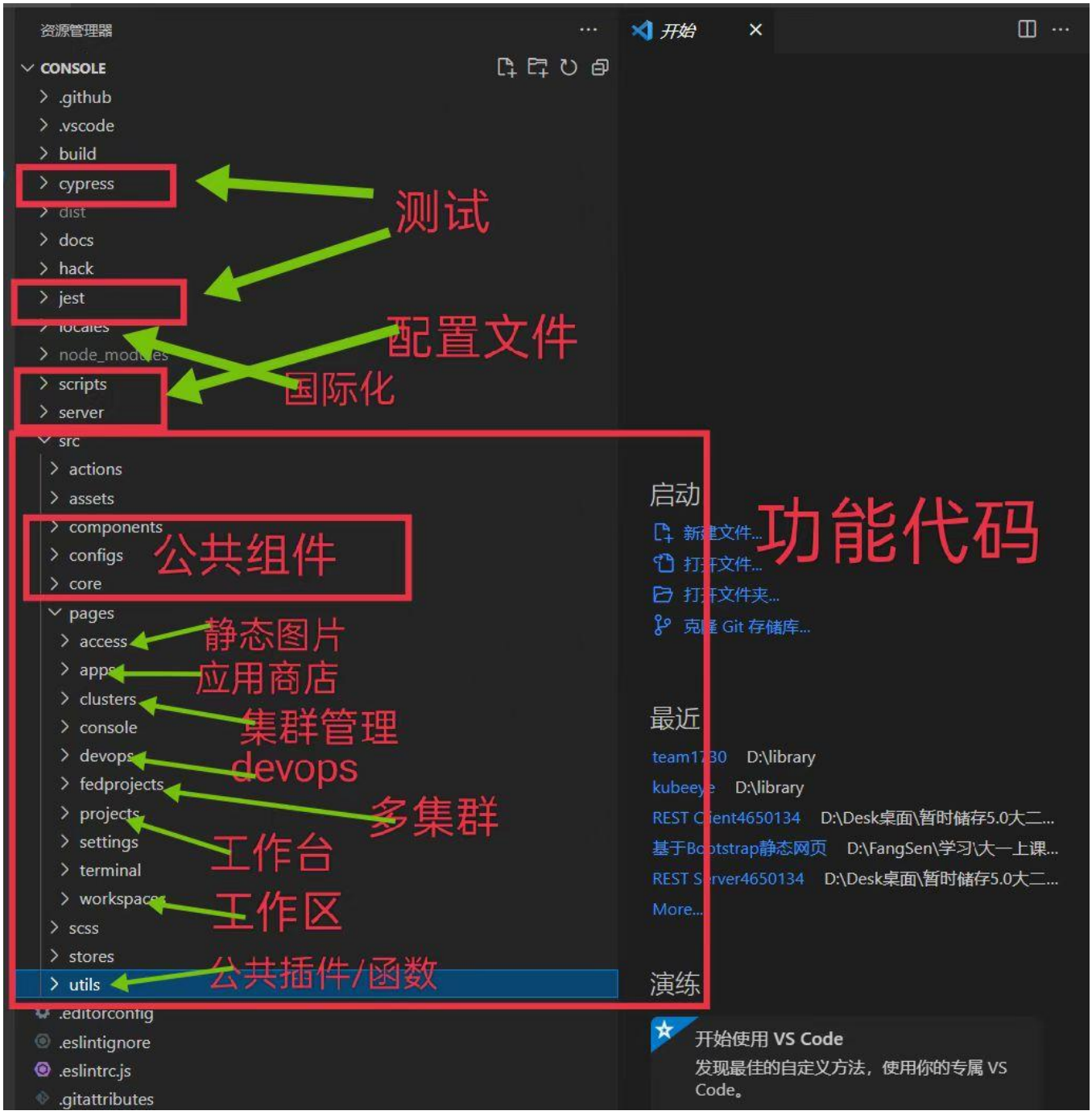
Our goal is to perfectly restore the plug-in list page and detail page using the ts and react stack and based on the KubeDesign component library. Ajax call interface is used to install, uninstall, start and stop the plug-in, and the status of the plug-in is monitored in real time through Websocket.

### Prototype

My experience in updating KubeEye comes from the background management system based on React. Js (FangSen9000/team1730: 字节青训营第二届元气满满小白队项目 (github.com)) It's very similar to the KubeEye Console, I have mastered the use of JavaScript/TypeScript, HTML, CSS and React. I also have the background knowledge of Docker and Kubernetes. Fully meet the knowledge needs of the project.

## My understanding of this project

If you want to do secondary development of a front-end panel, the first thing you need to do is to read its source code. My understanding of KubeEyeconsole's file is as follows:



# Development Process

### Community Bonding (June 15 - June 30)

The task at this stage is to get to know the project in depth, and maybe solve some bugs along the way. Do some research on the required technology, talk to community developers and mentors, and change some technical steps or plans.

### Coding Phase 1 (July 1 - July 31)

There are 6 weeks in Coding Phase 1 and an evaluation after the phase.

The goal of stage 1 is to develop KubeEye plug-in management front-end interface, mainly for plug-in list page and detail page development. Write a new plug-in list page in KubeDesign, taking into account future scenarios.

### Coding Phase 2 (Aug 1 - Aug 23)

There are 3 weeks in Coding Phase 2 and an evaluation after the phase. As for its specific execution steps, I have already made a detailed plan and part of the code, so I omit more.

### Week 1-3 (Aug 1 - Aug 23)

Use Ajax call interface to implement plug-in installation, uninstall, start, stop, and monitor the status of the plug-in through websocket. The aim in week 3 is to improve code quality. Maintainability is important to open source projects. Some problems should be solved in this week.

### Coding Phase 3 (Aug 24 - Sep 23)

If the task goes well, we will repair the issues. We note that some issues in the community are related to the front end, that is, our project console. We can consider completing them.

Once the goals of this phase have been achieved, we review the code and fix any known bugs in the previous code. And writing code should be documented. And then our work is basically done, and then the final evaluation. Such as, issue#3182 #3300 #3210.

### Buffer Time (7 days)

There are 9 buffer days in case something didn’t go as planned in the weeks before. I think some of the work might take less than two weeks, so we'll actually move faster and have more fault tolerance

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# More about Me

### Applicant Info


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### Self-introduction

As for me, I am a pathfinder, I love open source, and really enjoy the atmosphere of GSoC and OSPP or other open source activities. I work in the Virtual Reality Laboratory of Henan University under the guidance of Professor yanchaokun. I love the implementation of technology and have experienced many battles. I am very happy to discuss and negotiate with tutor Chen Zhen in Kubesphere community and complete this project. I am very happy to participate in this project, I have full confidence in its prospects, and I will continue to contribute to the project even after the OSPP ends.