

# **Tool to Visualize web thread pool** (for spring project based on tomcat server)

**Team name : project101(team B)**

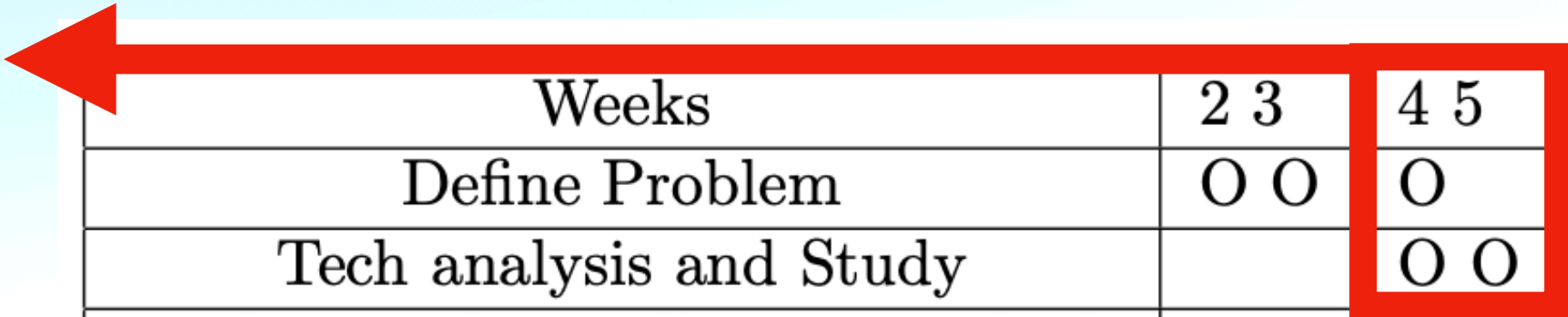
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- 1. Current Progress**
- 2. Overall Architecture**
- 3. Prototype(ui) & additional functions**
- 4. Selected frameworks**



# Current Progress

- Study and determination of technologies for each fields
- Design simple prototype of UI
- Design overall architecture
- Add functions

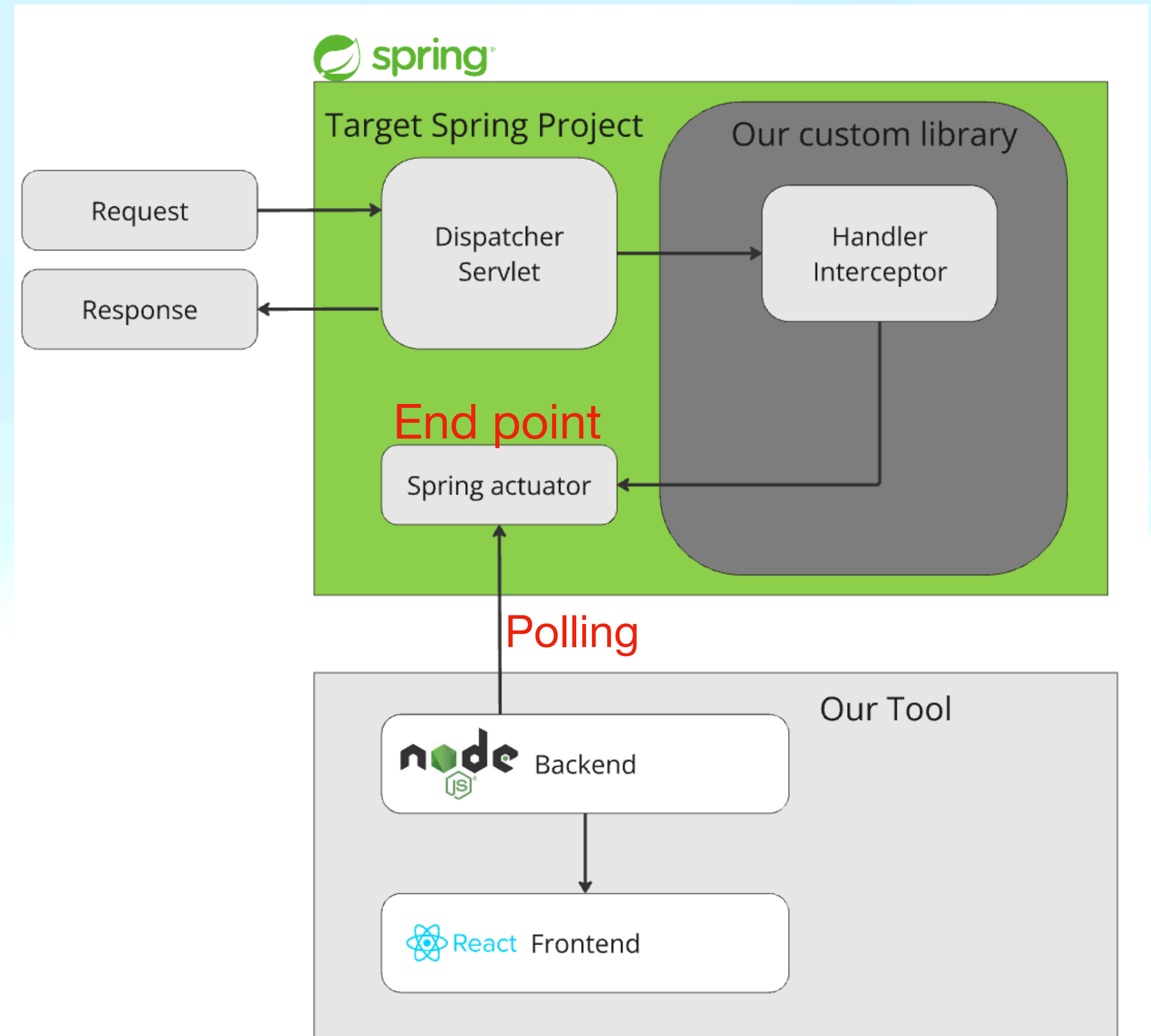


Weeks	2 3	4 5	6 7	8 9	10 11	12 13	14 15
Define Problem	O O	O					
Tech analysis and Study		O O	O				
Implement data collecting methods			O O				
deploy as library				O .			
develop web application				. O	O O	O	
UI/UX Design						O O	
Testing							O

Table 5: Weekly Schedule

# Overall architecture

- Custom library
- Backend
- Frontend

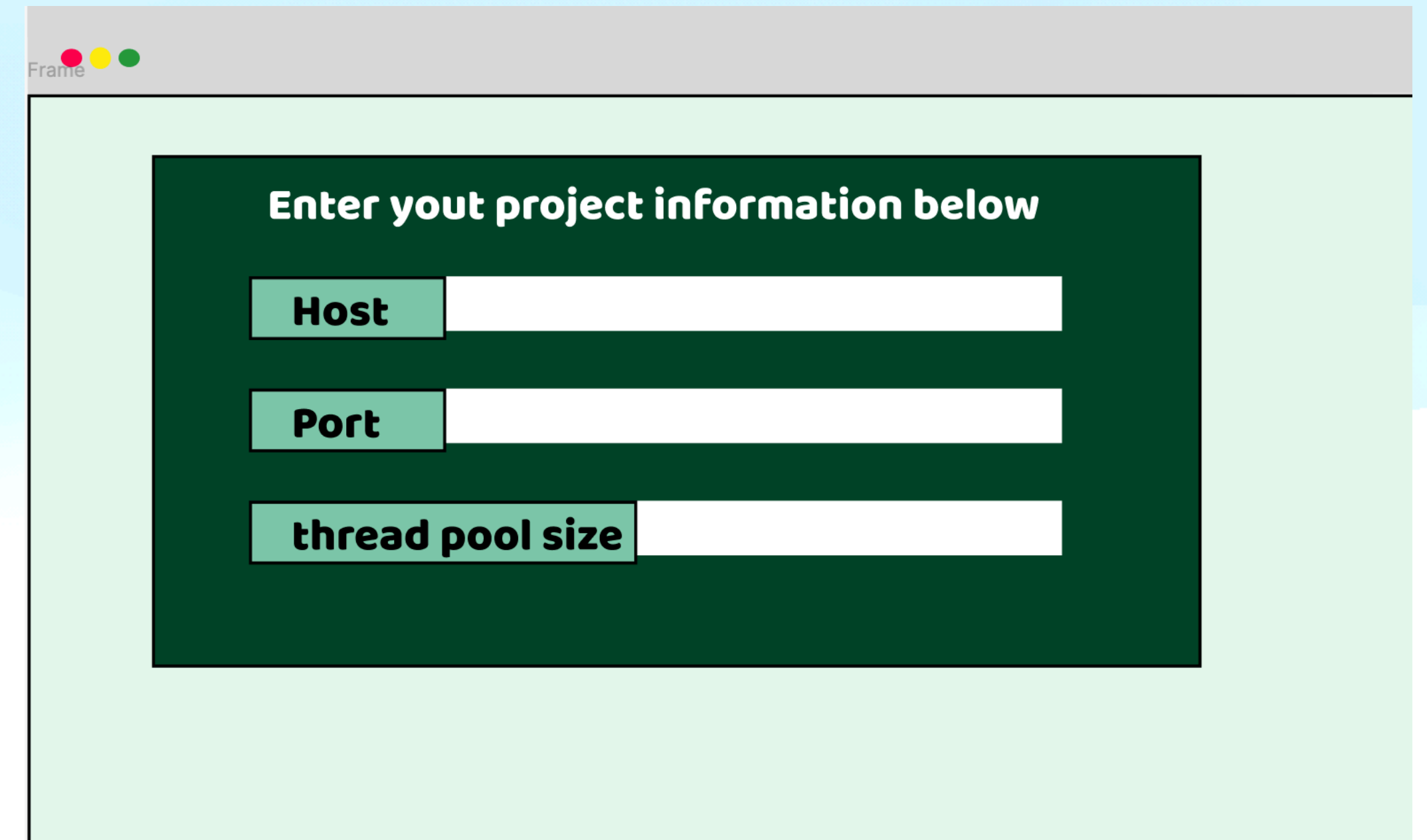




# Prototype of web page

## Concentrated on MVC pattern

- Clustering based on each controller
- Alarm function
- Express each thread as circle
- Memory usage of each single threads

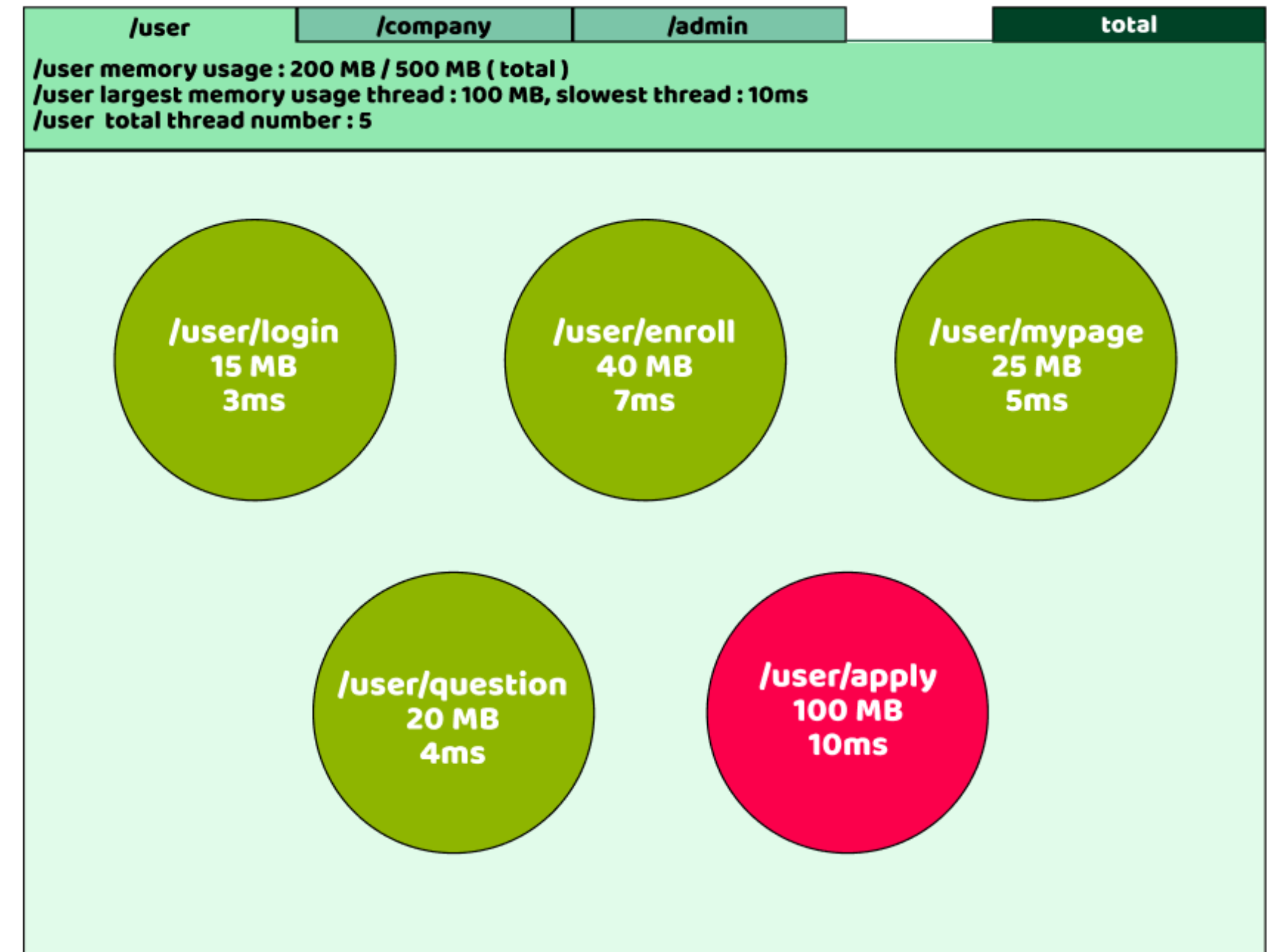


A screenshot of a web browser window showing a form titled "Enter your project information below". The form is contained within a dark green rectangular box. It features three input fields, each with a light green label box on the left and a white text input area on the right. The labels are "Host", "Port", and "thread pool size". The browser window has a light gray title bar with three colored window control buttons (red, yellow, green) on the left.

# Prototype of web page

## Concentrated on MVC pattern

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알람 경고를 주는  
**api**는 빨간색으로,  
메모리 사용량 높음



# Backend - node.js

- node.js is a runtime environment that allows developers to build highly scalable applications using JavaScript.
- Why we choose : our backend just does routing against only “one client”
- single threaded nature.
- low overhead for managing multi threads
- 



# Frontend - React

- Component based architecture -> we can manage each circle (thread) through components : good for reuse and management
- Virtual DOM -> effective for this system cause' this system requires lots of changes inspect of each threads and through virtual DOM, we can update UI fast and effectively





# Custom Library - Spring

- Our tool is targeting projects which are built with Java Spring framework. (Can be used with only Java Spring Project)
- Our tool requires those projects to use our custom library.



**Thank you**