University of St Andrews

CS4103 Coursework 1

Security Tools

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Goal

The goal of this practical was to implement a distributed application using communication middleware to collect data on user responses to the n-person prisoner's dilemma.

Part I

Communication Set-Up

The application was set up using Spring Initializr [1], which provided a Spring Boot application template, with the web and test starter dependencies. A controller class to provide REST request mappings was implemented, and the test connection method was created in the ProsecutorService class. Unit tests were written for both, and Postman was used to test the request when the application server was running, and to fulfill the criteria for part one.

Part II

Prosecutor Service 1 - Single Client Game

To provide a more user-friendly client, create-react-app [2] was used to boostrap a react.js application. By using a proxy setting, CORS issues were avoided while developing locally. A simple test button was supplied that would perform an asynchronous call to the API test endpoint, and then print the response to the screen (Figures 1 and 2).

Conclusion



Figure 1: Before Press



Figure 2: After Press

- [1] Pivotal Web Services. Spring initializr.
- [2] Facebook. create-react-app.