GUI Design Document

Team Name: Magic Square No Magic

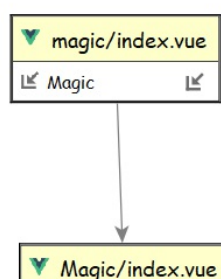| Name	SID
聂秋实	11813207
阮业淳	11812109
张宏彬	11810820
张韶丰	11811522
黎诗龙	11811407
高圣迪	11811405

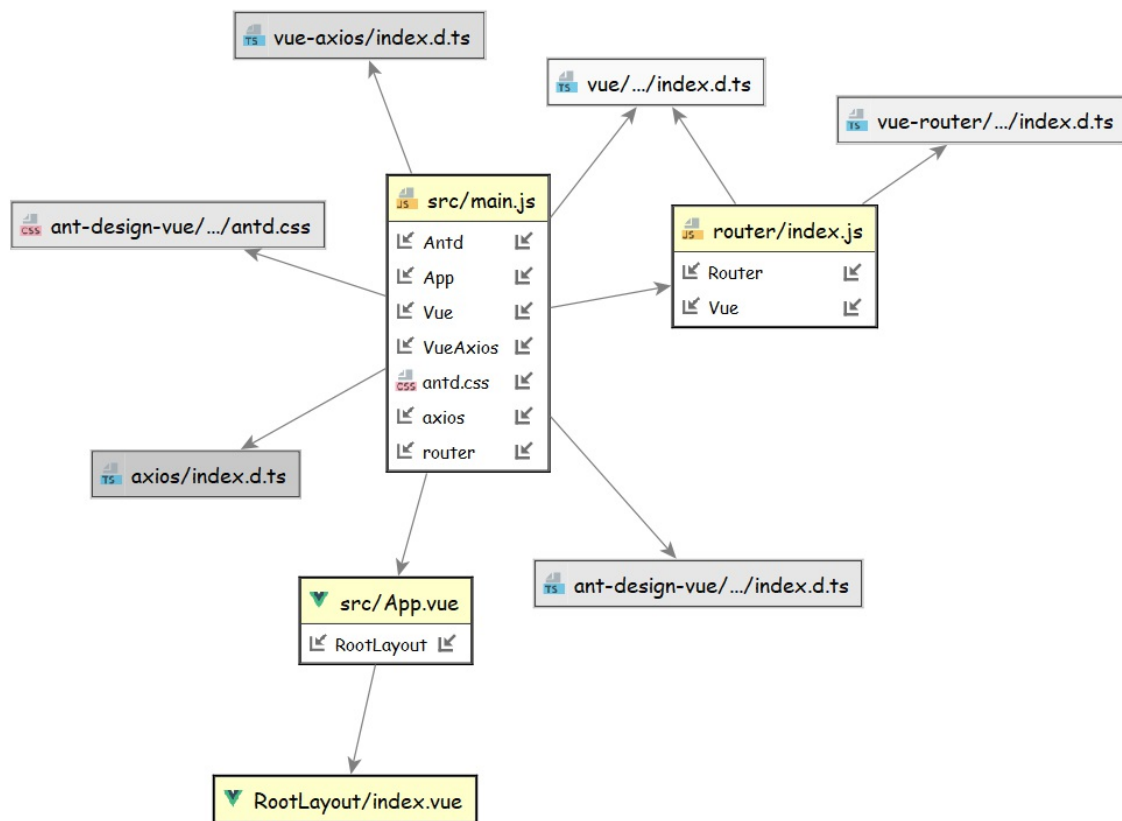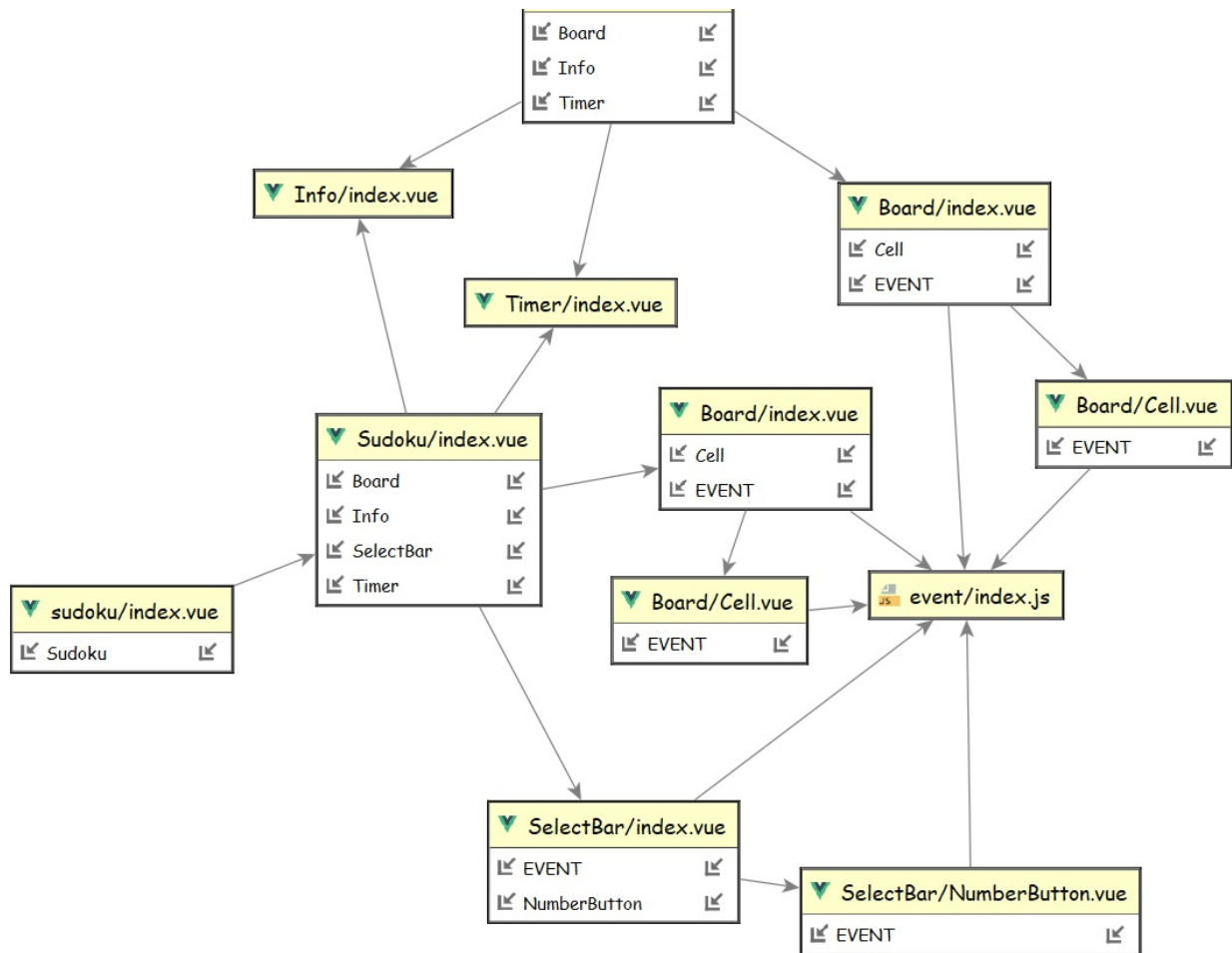## Structure

Directory Tree

```
src
├── App.vue
├── assets
│   └── logo.png
├── components
│   ├── event
│   │   └── index.js
│   ├── HelloWorld.vue
│   ├── Info
│   │   └── index.vue
│   ├── Magic
│   │   ├── components
│   │   │   └── Board
│   │   │       ├── Cell.vue
│   │   │       └── index.vue
│   │   └── index.vue
│   ├── RootLayout
│   │   └── index.vue
│   ├── Sudoku
│   │   ├── components
│   │   │   ├── Board
│   │   │   │   ├── Cell.vue
│   │   │   │   └── index.vue
│   │   │   └── SelectBar
│   │   │       ├── index.vue
│   │   │       └── NumberButton.vue
│   │   └── index.vue
│   └── Timer
│       └── index.vue
├── main.js
├── page
│   ├── magic
│   │   └── index.vue
│   ├── mrule
│   │   └── index.vue
│   ├── srule
│   │   └── index.vue
│   └── sudoku
│       └── index.vue
└── router
    └── index.js
```

UML

Board
Info
Timer

Info/index.vue

Board/index.vue
Cell
EVENT

Timer/index.vue

Board/index.vue
Cell
EVENT

Board/Cell.vue
EVENT

Sudoku/index.vue
Board
Info
SelectBar
Timer

sudoku/index.vue
Sudoku

Board/Cell.vue
EVENT

event/index.js

SelectBar/index.vue
EVENT
NumberButton

SelectBar/NumberButton.vue
EVENT

vue-axios/index.d.ts

vue/.../index.d.ts

vue-router/.../index.d.ts

ant-design-vue/.../antd.css

src/main.js
Antd
App
Vue
VueAxios
antd.css
axios
router

router/index.js
Router
Vue

axios/index.d.ts

ant-design-vue/.../index.d.ts

src/App.vue
RootLayout

RootLayout/index.vue

Techinical Stack

- Vue.js
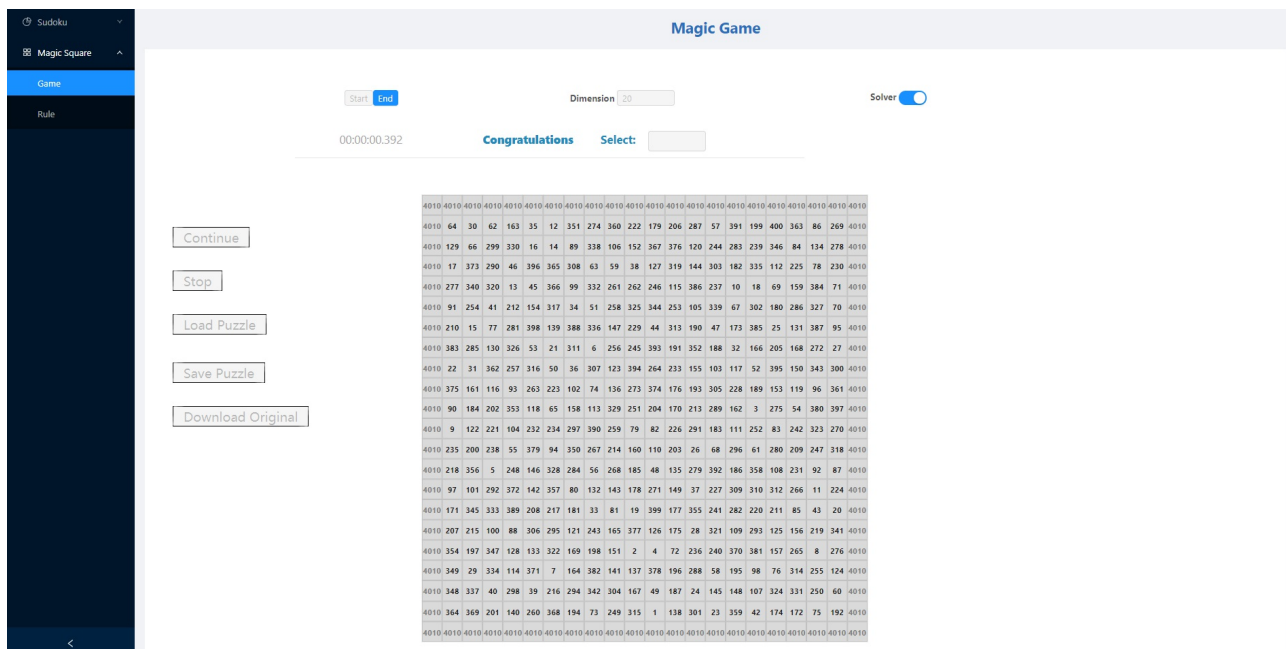- Websocket
- Axios
- Ant Ddesign

Features

- Seperation of back end and front end
- RESTful API
- Artistic and easy to access
- Real-time interaction between back end and front end
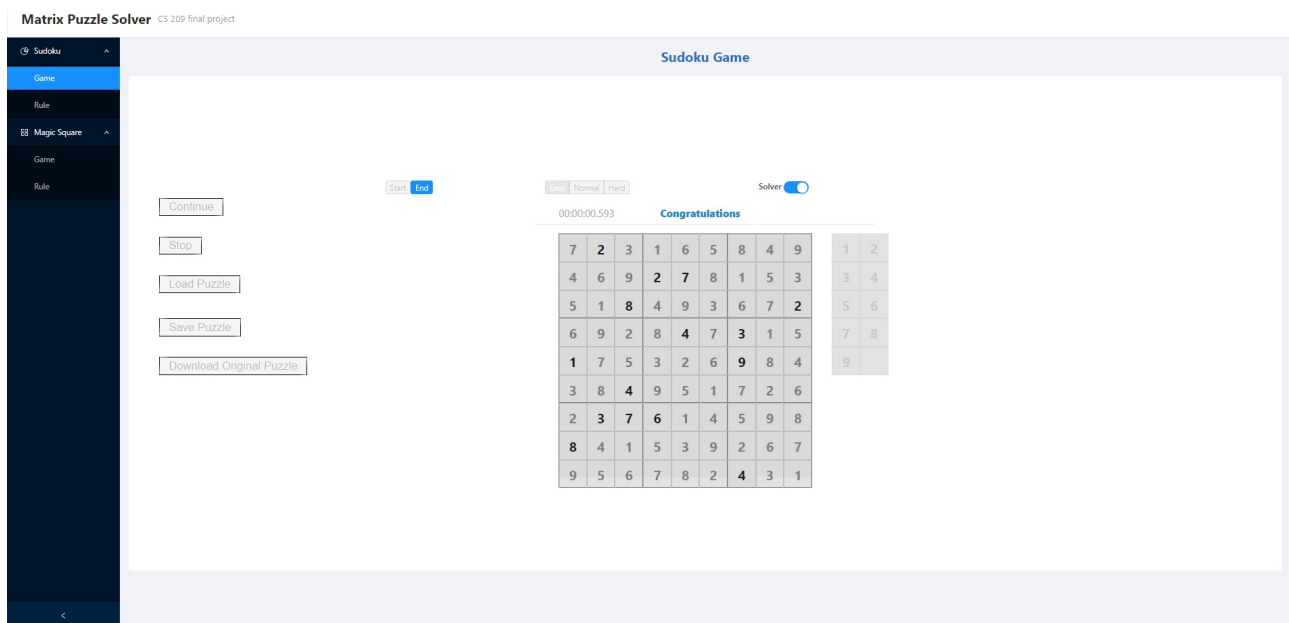- Customized logo

Core Components

- `Timer`: Recording time for the solving process.
- `Info`: Messages during the game and after the game is completed.
- `Magic`: Necessary magic square elements.
- `RootLayout`: The layout of the whole front end.
- `Sudoku`: Necessary sudoku elements.

UI

Magic Square

Sudoku

Acknowledgement

Thanks to 17881055/vue-sudoku (https://github.com/17881055/vue-sudoku). Our work is based on this repository.