

This project is a student frontend for viewing academic results in a certificate format. It consists of two main pages: the front page where students enter their enrollment number and the result page where their results are displayed in a certificate format, ready for printing.

#### **Features**

- 1. Enrollment Number Input: Allows students to enter their enrollment number.
- 2. **Result Display**: Shows the student's result in a detailed certificate format.
- 3. **Printing**: Provides an option to print the result certificate.
- 4. **Backend Integration**: Fetches result data from the backend server based on the enrollment number.

# **Project Structure**

```
java
 studentfrontend/
     public/
       index.html
     src/
         assets/
            - images/
                — Ct_logo.png
                CT University_logo.png
         components/
             Certificate.js
             FrontPage.js
            - ResultPage.js
         App.css
         App.js
         index.js
     .gitignore
     package.json
     README.md
```

# **Installation and Setup**

1. Clone the Repository:

```
git clone <repository-url>
cd studentfrontend
```

2. Install Dependencies:

```
sh

npm install
```

3. Run the Application:

sh

npm start

#### 4. Backend Server:

Ensure the backend server is running at `http://localhost:4000`.

# **Components**

## **1.** `App.js`

The main component that manages the state and renders either the `FrontPage` or `ResultPage` based on the current state.

### 2. `FrontPage.js`

Handles the input of the enrollment number and transitions to the `ResultPage`. It includes:

- An input field for the enrollment number.
- A search button to submit the enrollment number.

### ResultPage.js`

Displays the result in a certificate format fetched from the backend. It includes:

- The `Certificate` component to display the result.
- A back button to return to the `FrontPage`.
- A print button to print the certificate.

### 4. `Certificate.js`

Displays the detailed marks certificate (DMC) with:

- Enrollment number
- Student name
- College
- Course
- Semester
- Exam month/year
- Subject details (subject codes, subjects, and GPA)
- Status
- Percentage

# **Data Flow and Block Diagram**

#### **Data Flow**

### 1. Enrollment Number Input:

• The student enters their enrollment number on the `FrontPage`.

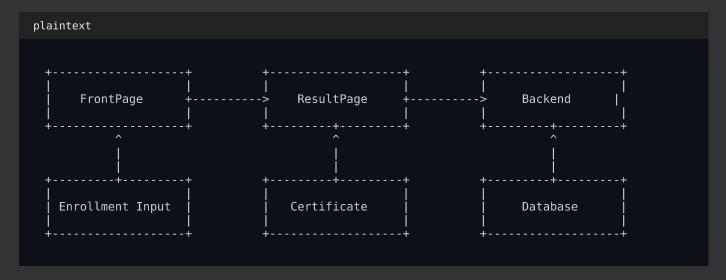


 Upon clicking "Search", the enrollment number is stored in the state and the view switches to `ResultPage`.

## 2. Result Display:

- `ResultPage` fetches the result data from the backend server using the enrollment number.
- The fetched data is displayed in the `Certificate` component.
- The student can print the certificate or go back to the `FrontPage`.

# **Block Diagram**



# **Explanation:**

### 1. FrontPage:

- Handles input of the enrollment number.
- Transitions to `ResultPage` on successful input.

### 2. Enrollment Input:

Component for entering the enrollment number.

#### 3. **ResultPage**:

- Fetches and displays the result data.
- Provides options to go back to the `FrontPage` or print the certificate.

#### 4. Certificate:

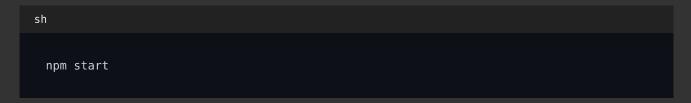
• Displays the detailed marks certificate with all relevant details.

#### 5. **Backend**:

- Stores and manages the data.
- Interacts with a database to retrieve the data based on the enrollment number.

# **Running the Project**

#### 1. Start the Frontend:



#### 2. Ensure the Backend Server is Running:

The backend server should be running at `http://localhost:4000`