const express = require('express');

const app = express();

app.use(express.json());

class Team {

constructor(name, score) {

this.name = name;

this.score = score;

}

}

class player {

constructor() {

this.players = [];

}

getinput(reqBody) {

const { teamSize, playerScores } = reqBody;

for (let i = 0; i < teamSize; i++) {

const playerScore = parseInt(playerScores[i]);

const team = new Team(`Player ${i}`, playerScore);

this.players.push(team);

}

}

claculateavgscore() {

let totalScore = 0;

for (let i = 0; i < this.players.length; i++) {

totalScore += this.players[i].score;

}

this.avg = totalScore / this.players.length;

}

calculatemaxscore() {

let maxScore = 0;

for (let i = 0; i < this.players.length; i++) {

if (this.players[i].score > maxScore) {

maxScore = this.players[i].score;

}

}

this.max = maxScore;

}

calculateminScore() {

if (this.players.length === 0) {

this.min = 0; // Set a default value or handle the empty array case as needed

return;

}

let minScore = this.players[0].score;

for (let i = 0; i < this.players.length; i++) {

if (this.players[i].score < minScore) {

minScore = this.players[i].score;

}

}

this.min = minScore;

}

}

app.post('/calculate', (req, res) => {

const Player = new player();

Player.getinput(req.body);

Player.claculateavgscore();

Player.calculatemaxscore();

Player.calculateminScore();

const result = {

averageScore: Player.avg,

minimumScore: Player.min,

maximumScore: Player.max

};

res.json(result);

});

// Start the server

app.listen(3000, () => {

console.log('Server listening on port 3000');

});