REACH BEST

Coding Creativity

Challenge

Coding Creativity Challenge

🥳**Congratulations for being selected to the Reach Best Application Phase 2!** You will now be performing a 1 week Coding Creativity Challenge to advance to the next Phase. A percentage of Phase 2 applicants will be selected for a Phase 3 interview, and 2 applicants will be offered a position at Reach Best.

The Objective of the Coding Creativity Challenge is to assess the applicant's ability to perform under pressure, to be resourceful to come up with solutions to unseen problems, and to fit Reach Best's workforce culture.

Deadline for submission: Monday, December 11th by 11:59 pm (Pacific Time).

Submit to: https://tinyurl.com/RBchallenge-submission

Challenge Description

Selection *one* of the following options to complete.

Option A: Web App

Book-matching web app

Develop a web app with the ability of matching people's personalities with literature genres and specific books, using a basic form in which you will have to ask 2 questions with different types of inputs. This information must be entered on a basic database where a decision is going to be made and displayed on the screen, based on a difference of vectors.

Front-end: create a 1 page user-friendly User Interface with a) a fixed navigation bar, b) two inputs for the user's answers, c) a frame that displays a visual representation of the results, d) a design that reflects your style.

Back-end: create a basic database with the following: a) students are scored on 2 to 3 different criteria, b) books are scored on 2 to 3 different criteria, c) calculate the difference of vectors, d) use the difference of vectors to look for books that match.

Documentation: one page of explanation of how your web scraping tool works, the technologies you used and why you chose to build it in that way.

Option B: Chrome Extension

Web scraping tool to calculate weekly change in Market Cap for Cryptocurrencies

Site: https://coinmarketcap.com/

Front-end: create a 1-page Chrome extension UI that allows users to get data for Cryptocurrencies of their choice, with a feature for: a) selecting specific Cryptocurrencies, b) selecting specific weeks, and c) a design that reflects your style.

Back-end: write a program that: a) gets data on weekly summary of Market Cap, b) saves data as JSON, c) downloads files on computer, and d) calculates the total operation time.

Documentation: one page of explanation of how your web scraping tool works, the technologies you used and why you chose to build it in that way.

What we look for

- Easy-to-use Front-end design
- Straightforwardness of visual representation of results (user can find what they are looking for visually)
- Effective, efficient and useful book matching system
- Ability to build from scratch
- Matches the specifications of the challenge

IMPORTANT: All the website's code must be your own (copy pasting someone else's code is not allowed). You are free to use whatever programming language or library you think will allow you to build an effective, efficient and useful website.

Reach Best Tech Stack

Consider using our tech stack, if appropriate:

- Next.JS, React.JS, Node.JS, Tailwind CSS

Submission details: you will be submitting your Coding Creativity Challenge work to this Form. You can either send us a zipped file containing your website and explanation document, or you can share a link to your GitHub repository (optional: publish it to GitHub pages and share the page link). Please have your documentation inside the zipped file or in your GitHub repository. In the submission GitHub and/or file, please include:

- Your Name
- "Reach Best Full Stack Engineer Application 2023"

Closing remarks

We are happy to take any questions or comments about the Coding Creativity Challenge at info@reachbest.co! All applicants will be added to a Google Calendar invite to remind them of the deadlines for submission. **All applicants will hear back about their results after the deadline.**

We look forward to going through your creative projects!

Ryusei + Reach Best Team

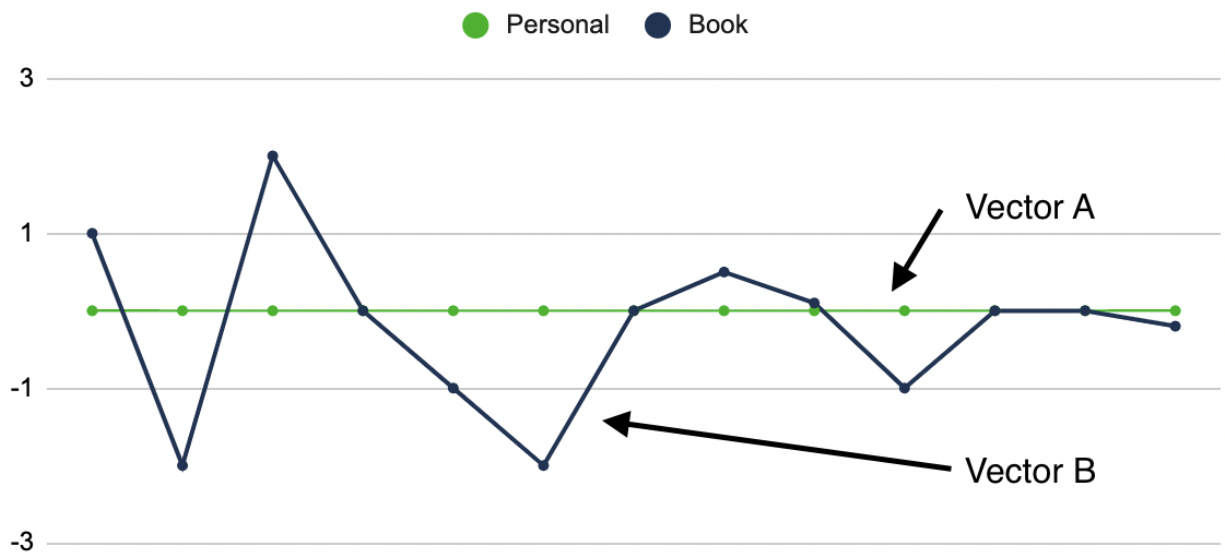**Ryusei Alexis Best Hayashi**

Founder and CEO at Reach Best

Website | Instagram | LinkedIn | Facebook

Frequently Asked Questions

1. **What do you mean by the difference of vectors?**

    A vector (for our purposes) is a grouping of information into a line that can be represented in a line chart. For instance, suppose you had an individual who had a score of 3 in color, a score of 1 in height, and a score of 2 in time. Their vector would be the line 3, 1, 2, which can be compared with other vectors to see how (di)similar they are. You are welcome to implement more complex algorithms of difference of vectors as well.

2. **What if I don't know how to build one of the features outlined in the Challenge Description?**

    The Objective of the Coding Creativity Challenge is to assess the applicant's ability to perform under pressure, to be resourceful to come up with solutions to unseen problems, and to fit Reach Best's workforce culture. We are evaluating how you respond to situations that require you to build something new and acquire new skills on-the-go. The most important thing is to submit something that showcases your strengths.

3. **How much effort should I put into this assignment?**

    Just enough to solve the challenge. Don't overstress about having the perfect solution, the perfect design, the fastest software, or the most extensive documentation. Past developers have told us that they solved the challenge in 4-8 hours, planning and coding.

How we review submissions

Criteria

Level	Easy to use front-end design	Straightforwardness of results visualization	Efficiency and effectiveness of back-end matching system	Creativity and authenticity
-3	Deplorable	Deplorable	Deplorable	Deplorable
-2	Bad	Bad	Bad	Bad
-1	Insufficient	Insufficient	Insufficient	Insufficient
1	Sufficient	Sufficient	Sufficient	Sufficient
2	Good	Good	Good	Good
3	Excellent	Excellent	Excellent	Excellent