

Technical Assessment.

Technical Assessment Instructions:

- 1. Please read the instructions carefully before proceeding with the assessment.
- 2. The assessment is designed to test your technical skills and knowledge in the relevant programming language(s) and skills.
- 3. You will have a maximum of 5 days from the moment you have received the email , to complete the assessment.
- 4. The assessment will consist of real-world scenarios
- 5. Submit your solution(s) in a separate file(s) along with clear documentation on how to run your code.
- 6. Your solution(s) will be evaluated based on correct functionality, code quality, and design.
- 7. Good luck and show us your skills!

Note: Failure to follow the instructions may result in partial or complete disqualification of your assessment results.

The Test

Build a Multitenant TODO list application that allows a user to create and manipulate multiple to-do lists and invite other users to collaborate on specific lists.

Features:

- User authentication and authorization
- Ability for a user to create and manage multiple to-do lists
- Ability for a user to invite other users to collaborate on specific lists
- Ability for users to mark to-do items as complete or incomplete

Optional Features:

- Ability for users to prioritize to-do items
- Ability for users to search and filter their to-do lists

Technical Requirements:

- Multi-tenancy architecture to support multiple users and their separate lists
- Data storage and management for user accounts, to-do lists, and to-do items
- User authentication and authorization using a secure method
- Ability to send email notifications (for invitations and whatever else you think needs email notifications)
- · Responsive design for web and mobile access

Technologies to use:

- React.js for the frontend
 - o React Router to handle navigation
 - Axios for API requests
 - Whatever UI library you want to use, we use mostly Bootstrap or Tailwind, but it doesn't matter and you can write your own CSS if you prefer.
- Node.is for the backend
 - Express.js to create your API
 - MongoDB with Mongoose for an ORM

Deployment (Instructions on where to host for free if you don't want to spend money on a VPS or paid hosting):

- Use netlify or Vercel to deploy the frontend, they are both free.
- Deploy the backend on Cyclic (cyclic.sh) it's free.
- Use Mailtrap (<u>mailtrap.io</u>) for emails they have a free tier with 1000 free monthly emails and a dashboard to test if your emails work and instructions to use nodemailer to send emails so your integration is just 1 function.
- MongoDB has a free Database that you can use for deployment, if you've already used that, Railway (<u>railway.app</u>) has a free tier you can use too.

Notes:

- There's no need to create custom email templates, just plain text will do for the demonstration
- Use version control (preferably store your code on GitHub) during your build process and make sure you use clear commit messages.
- Have a Readme.md for all your repositories with instructions for when we want to run and test your code locally.

Submission:

- Send us:
 - The link to the hosted frontend
 - Link(s) to the GitHub repositories.
- If you need any extra accommodation, please feel free to react out to us.









