

Practical - [Radivision](#) Inc.

Radivision is the new Entrepreneurship Network — a disruptive, interactive, streaming video and social network that delivers visibility, access, and investment into entrepreneurship's opaque, yet fascinating industry through our original video series, curated best-of-class resources, and globally connected community.

We believe that entrepreneurship is the path to peace and prosperity in our world today -- but the lack of accessibility to resources and other challenges create a foreboding 90% failure rate for entrepreneurs that is hard to overcome. Radivision allows viewers/members insider access to knowledge, resources, relationships, lots of PR exposure, and potential investment opportunities to increase their success.

Radivision is building a savvy, resourceful, and creative engineering team in Cairo to work with our founder and US teams in Silicon Valley and Los Angeles. The founding engineering team is building our next generation video, content, and social community platform dedicated to connecting, supporting, and celebrating the entrepreneurial community.

The office is in the beautiful, new, energized, entrepreneurial community of KMT House in Maadi. You will join our current team members in Cairo and will work closely with Radivision's CTO and CEO, based in Silicon Valley, through regular team meetings, workflow management tools, and additional correspondence.

Highly competitive compensation offered. Equity and other bonuses upon funding and certain milestones.

The purpose of this test is to allow us to evaluate your abilities as a professional software engineer in context of the requirements for Radivision. **Spend no more than 4 hour on the test.**

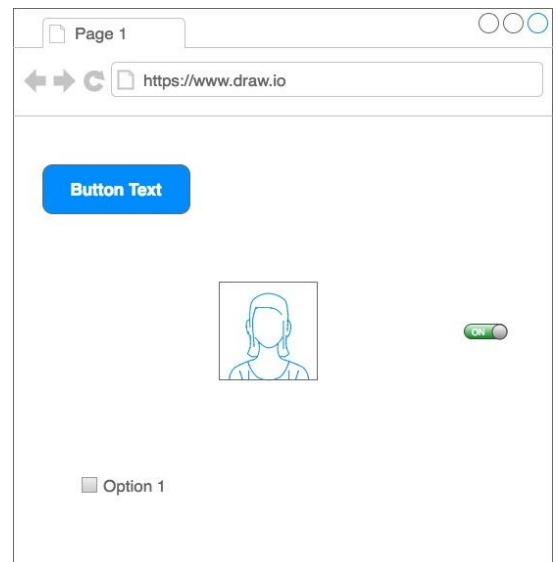
Please answer the first question and then prioritize the remainder of the questions to ensure that you complete as much as possible in the 4 hours whilst highlighting your best skills.

(1) Using either Javascript or Typescript, write code to reverse the word order of a sentence; for example, *Mary had a little lamb.*

- a. Spaces may be prepended to, or appended after, the sentence. Spaces must not be truncated or removed.
- b. The number of spaces between words may vary and must not be truncated or removed.

(2) Create a single page application using Javascript or Typescript and a well-known Javascript framework; React for preference but Aurelia, Angular and JQuery are examples of other acceptable frameworks:

- a. The page contains three buttons in separate areas of the page and single image. Note that your buttons can be anything and can all be of the same type - the diagram is just a hint. The image and each button must be packaged separately; for example, discrete React controls.
- b. Clicking on a button displays a specific image in the image area - each button has a different image.
- c. A button should give visual indication that it is currently selected or not selected.
- d. Clicking on the image cycles through the images and button states; for example, image one displayed means that button one should be shown as selected.



(3) A customer would like to create a new website called *Flix.com*, which is similar to the [netflix.com](https://www.netflix.com) website.

- a. List 5 user stories (use cases) for the website, each with a short description.
- b. List 5 features of the website.
 - (i) For each feature list up to 5 tasks which you would need to complete in order to deliver the feature
 - (ii) Estimate, with justification, the time required for each task.
 - (iii) Could you describe around ten end-points for the RESTful API? Try to provide different HTTP verbs and resources for the end-points.

(4) Could you build and share the code for a proof of concept for the website:

- The application should be in a Github [monorepo](#) containing a web and an api folder.
- The api folder should contain a nodeJS application serving a list of movies through the endpoint GET /movies. The list of movies can be hard coded in the api application (no need to connect to a database).
- The web folder should contain a React application created from the Facebook [create-react-app](#) boilerplate and consuming the api application to display the list of movies.

Please don't hesitate to contact us if you have any questions.