Education Horizons

Introduction

This document presents the requirements for the challenge sent to aspiring Education Horizons developers during the interview process.

The Challenge

For this challenge, we would like to see an application that will produce an image in which each colour occurs exactly once — with no repition and no unused colours. For the purpose of this challenge; colours are made up of three components — red, green, and blue. We require you to break each colour component into 32 steps — 8, 16, 24 .. 256 — this means when combined, you will have 32,768 discrete colours to utilise.

Criteria of Acceptance

- There should be no reuse and or repition of a single colour.
- Each colour component should have 32 steps.
- Your colour pallette should be made up of 32,768 unique colours.
- You are required to use all 32,768 unique colours.
- Do not make use of existing graphics or files.

Nice-To-Haves

- The result should be aesthetically pleasing (or at least interesting).
- Elegance in algorithms and data structures.
- Clean and well documented code.
- A README.md file explaining your process.

FAQ

- Are third-party open source libraries such as React, MUI, Ionic, ImageMagick allowed in my submission?
    - Yes, but please include dependencies and instructions with your

submission.

- What browsers need to be supported?
  - If your submittion is web-based; then all modern browsers should be supported.
- What version of Java/JavaScript/Python?
  - Any is fine, please provide information regarding so.