AI/Python Take-home Test

Please complete the following exercise and submit all relevant documents in a shared folder/zip file or Github repository. Spend as much time as you feel necessary to achieve the goal, and if you run short of time, please indicate where you left off and what next steps you would have taken to complete the exercise.

Included with these instructions are a JSON file containing the structural representation of a Landing Page (**test.json**) and a screenshot (**screenshot.png**) showing a visual representation of the same.

If you have any questions, please reach out to your Redbrick hiring manager.

Introduction:

The json file provided is used internally to represent and create a landing page. At the highest level, you will notice keys that represent properties that pertain to the page globally, such as the *"pagesettings"* key that has within it *"backgroundColor"*. You should also notice an array of *"boxes"*, each of the elements in this array represents a section on the landing page (see screenshot). For example, the first 3 sections have types of Hero, Countdown Timer, and Testimonial, respectively. There are boxes within these boxes, and at the lowest level the boxes represent widgets, such as text, images and buttons.

ToDo:

1. Use Python to extract the **text** from the textboxes and buttons within the page (the text is labeled with the key *"text"*). In your extraction, make sure you keep track of what type of text you're extracting from, for instance, text associated with a button has type *"LpButtonReact"*, while paragraphs have type *"paragraph"* and headlines have type *"headline"*. In our example, the first textbox has the type headline and the text associated with it is "Optimize your team's holiday schedules for just $10.", and the first button reads "Start Scheduling".

2. Next, after extracting the text, replace the content of the text. Come up with an AI prompt or a set of prompts that can replace the values of the landing pages text content with new context. The current page's context pertains to ScheduleMaster (refer to the image provided), a digital scheduler to help someone schedule tasks. The new context may be of anything of your choosing, for example if we were to use LeadPages, the context would be a landing page builder to help you build landing pages for your

business. Ideally, paragraphs that are followed by a headline are related to one another if they are in the same section. For example, in the provided example, the paragraph that is followed by the first headline reads: "Exclusive holiday discount for new clients: You pay only $10 now through January 1 for unlimited employees, calendars, and dashboards.". This information pertains to the headline that mentions a holiday deal for $10. Be able to replace the content of the original text boxes with the new content.