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Information Technology and UX Design

An interest in technology led me to User Experience Design. After starting in and creating the role of Accessibility Specialist at BYU Continuing Education, I realized the power of great design and its impact on our lives. This realization perfectly reflects my lifelong interest in excellent products and the design elements that set them apart from their competition. Soon afterward, I switched my major from Computer Engineering to Information Technology with a personal emphasis on Human-Computer Interactions. This change has allowed me to continue developing a skill set I'd already built and use that skill set to ensure the success of each of the projects I've worked on.

featured projects

Picking three cases to showcase was not easy. But nobody wants to read a 30-page deck. Each of the following projects had an impact on my creative process, life, and career. Let's talk about it.

BYU DCE	What 2 Do	Autoliv IT

BYU DCE

Building an accessibility focus and reviews

Problem

Accessibility was being overlooked

Beginning as early as 2015, educational establishments were being hit by lawsuits for having inaccessible digital content on paid-for and free courses. This was a warning for BYU DCE. The prestigious global course provider of BYU Continuing Education would be left in the dust of their competitors without designers educated about the accessibility needs regarding their creative environments. BYU needed to step up its game.

How could BYU Continuing Education continue to sell high-end educational courses with accessible content without understanding accessibility guidelines and regulations?

I was hired in a new role to fix the problem. Together, my coworkers and I compared WCAG 2.0 and other accessibility guidelines against current standards at BYU DCE. We learned the ins and out of Digital Accessibility and how it applies specifically to BYU. With this knowledge, we audited courses and websites, and trained employees who were writing digital content.

Insights

Accessible course design is user/student focused

Some designers at BYU DCE had been producing courses for many years. They didn't want to be told how to do their job, especially by a student who had recently started an undergrad. The need to make changes in courses had to be in the perspective of the user and not from someone "analyzing" courses.

Information gained from audits should be presented in a way that is best understood by the person who will be using the data

During the beginning month of research I became familiar with many terms common to accessibility and user-centered design. While auditing my first couple of courses, I made bulleted notes showing where changes needed to be made with a description of the issue. These notes were then sent to the course designer to fix the issues. However, no changes were ever made because the issues were not understood. For that reason, the notes were tossed to the side.

Solution

Design a template document that was easily understood

A excel template was designed to better present the data and show best practices on how to make content more accessible. Provided in the template were links showing what standards we were comparing to. Why these standards were necessary and who to contact if you had a question. Every issue was connected to a quick description (which also had a link to how to fix it), the location of the issue, and notes to stated why it was needed.

This template was improved on many times as I got feedback of repetitive questions and other information. **Changes to courses were being made quicker, and less issues were being seen.**

One improvement that I didn't expect was in trainings. There was way more understanding after the template was being used. More develop questions were being asked. Designer's mindsets were changing from why do I have to do this to how can I do this. **Accessibility changed from an obstacle in course design to an opportunity for improvement.**

Why was this project featured? This job was different. In previous projects, after interviews or lectures, I knew what I would be doing. I had a basic plan to do my best work. I was prepared and educated. As an accessibility specialist, **I walked on to a job I knew nothing about.** After a short time of research, I began offering professional (sometimes bordering legal) advice, gave training, and performed in-depth audits of courses. This undertaking of accessibility taught me to **always look at things from multiple perspectives**, **be clear in my communication**, and **changed the way I thought about user experience**.

What 2 Do

A class project in User Interface Design

Problem

Online Dating Apps leaves its users in the dust after connecting them to each other

After a productive brainstorm with my classmates, we realized that each of us have one solid date idea we use for first dates. Online surveys and indepth research showed both recently introduced and longtime couples were getting bored of having the same date over and over again. Many people had a want for change and desire for adventure, but this was not enough motivation to deviate from their habitual experience.

After matching on online dating applications, two people may get together and the same boring date they had with their previous matches. This leads to a fatigue and may leave a false negative impression on people who actually match.

We saw the opportunity to solve this pain.

Insights

Date night's should be stress-free

First dates can be difficult. Awkwardness from both parties can leave a bad impression. A date night shouldn't feel like work, it should feel stress relieving.

The designer's conceptual model and the user's conceptual model can be vastly different

Although our group had great ideas, we found **they did not always jive with what the user wanted**. Sometimes we had to simplify instead of complicating our solution to the problem.

> **"Design is really an act of communication, which means having a deep understanding of the person with whom the designer is communicating."**

-Donald A. Norman, The Design of Everyday Things

Surveys and user testing allowed us to test our ideas before the project was completed, saving us time and resources.
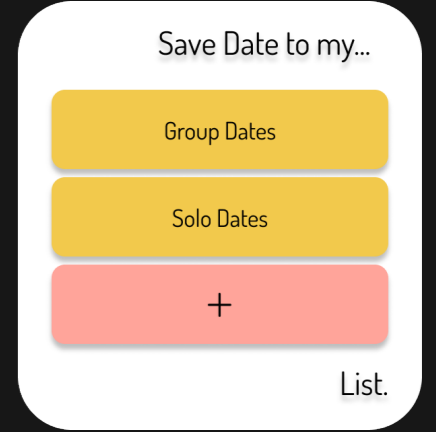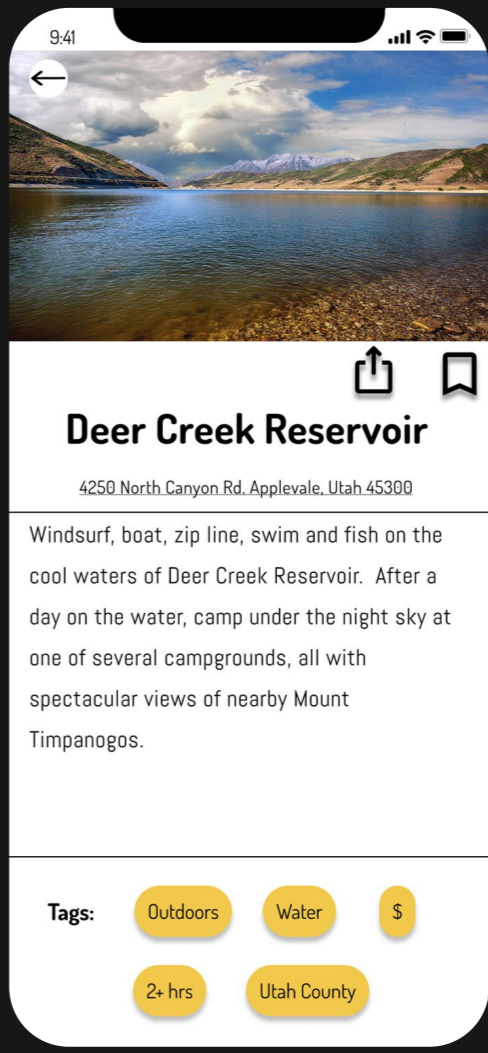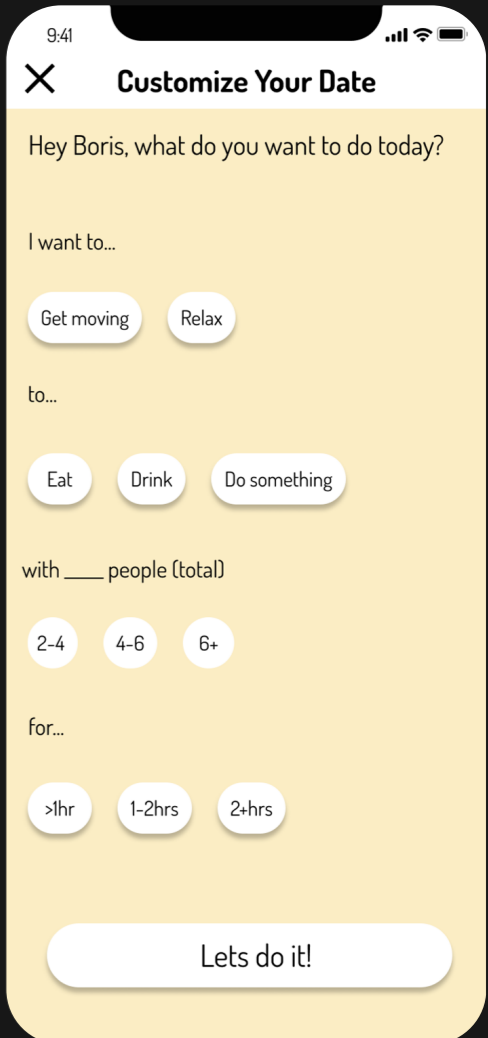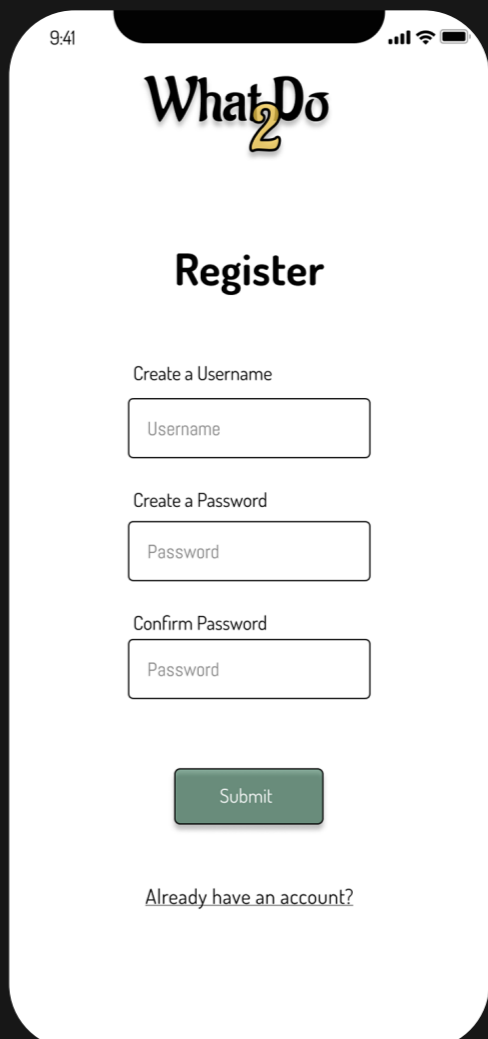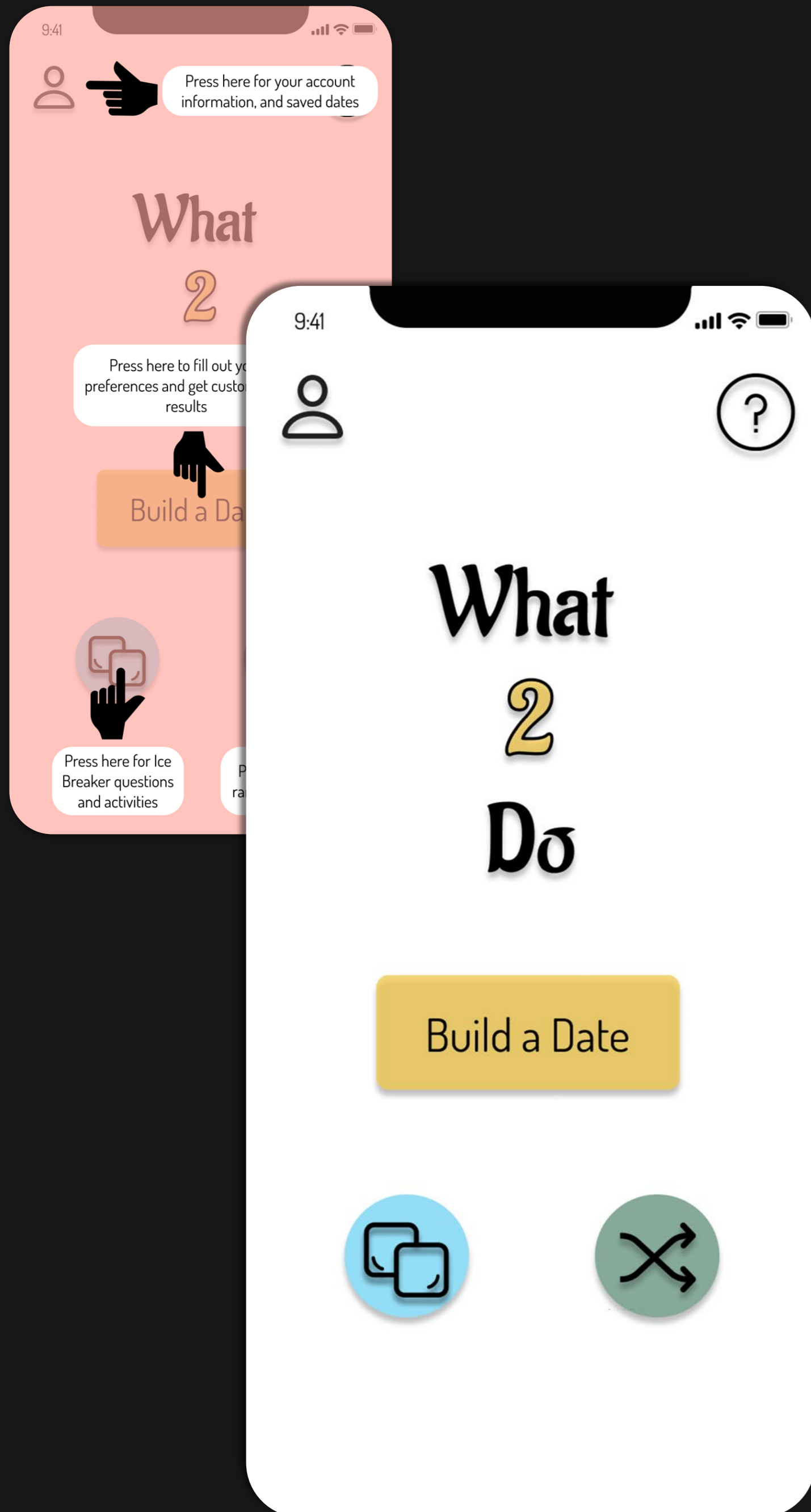
Solution

Use the online dating algorithm to look for date ideas

Using a quiz we asked the user what they wanted...

How long should the date be?
How much money do you want to spend?
Do you want to have a relaxing date?
How many people will be involve?

After answering the quiz the user was presented with activities recommended and rated by users that fit their answers. This allowed users to be stress free on the date. They were able to have new experiences without confusion.

We found that by tagging the dates with information regarding the time, money, and level of energy required, users were able to relax and be with the other person instead of spending mental resources on logistics.

Our concept removed common stressors for dates and allowed the user to have a positive experience.

Press here for your account information, and saved dates

Press here to fill out your preferences and get custom results

Build a Date

Press here for Ice Breaker questions and activities

9:41

What
2
Do

Build a Date

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During university classes, I have done many projects requiring knowledge on usability and design. Although I do not believe this my most visually pleasing concept, I was truly able to follow **Norman's iterative circle of design** (Observation → Idea Generation → Prototyping → Testing). I learned that following a good process can save time, money and resources. **By following a proven process, a team's efforts are magnified.**

Autoliv IT

Solving problems with quick thinking & managing global initiatives on a local level

Problem

Downtime equals revenue loss

Many computers on a production floor run 24/7. Any period of time those computers aren't running is counted as lost profits to the company. Precautions need to be in place to ensure the constant status of these machines.

Global teams cannot manage each project on a local level

Autoliv has 117 different facilities across the world, and their infrastructures managed by 40+ global IT teams. It is not in the global teams scope to understand and manage each facility on a local level. Instead, when something needs to be physically done a process is usually described to the local team and given a deadline. **This adds to local IT responsibilities that lie outside of the average job description.** Gathering a team of the appropriate people, determining the scope and objectives, communicating progress and assigning tasks are all project management job requirements, not local IT.

Insights

You are in-charge of setting your own priorities

With responsibilities of vast level difficulty, time-dependencies, and cooperation, I had to adopt many task management practices that I had previously ignored. I learned to say no responsibly when the current task was more important. I learned to categorize my tasks to how they would be fit the schedule. It became important to remind users to put in tickets for requests and incidents. **Tasks had to be documented.** A messaging system like Slack, or Microsoft teams is not decided to set priorities, add reminders, and tell due dates.

Different computer incidents are caused by the same issue

When it came to fixing small issues with computers, I found that many incidents reported from different users were interconnected. For example many users would report their emails weren't sending, when an wifi access point failed. Or, usb ports were failing on computers were the mistake of a missing updates on the computers. **Sending findings like these early on, to the appropriate teams, resulted in fewer incidents in the future.**

Solution

A supportive role like local IT should be proactive not reactive.

Given the vast amount of projects, requests, and incidents, it is important that you document your daily actions. Whether it is writing down the specifics to a process involving many teams or stating how you fix someone's email, you never know when that information may become important again.

Not every problem can be fixed immediately, so explain to the user when solutions have been attempted and the possible fixes. In future, if/when the same problem surfaces, good documentation allows the problems to be solved quickly.

When it comes to helping global teams with initiatives, explain every move. Asking questions is not a sign of ignorance. Be confident, but don't let pride be the cause of a problem. **A good description of a small issue now can help prevent a large issue tomorrow.**

Being a member of a local IT is more than fixing a computer and fulfilling a ticket. I**t is about being the face of IT**. Most of the time, a user doesn't know the specifics of the technology running the business. Honestly, they shouldn't have to know. As local IT, I prioritize my time, solving problems ranging from helping someone with their email to setting 1,000+ devices to global IP configuration standards. I put on many hats in my role to keep business moving.

Thank you.

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