



There's an App for That

Good UX and How it Helps Complicated
Ideas Feel Approachable



U.S. DEPARTMENT OF
ENERGY

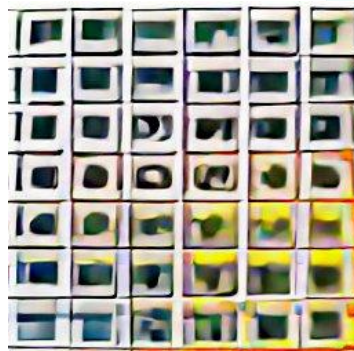
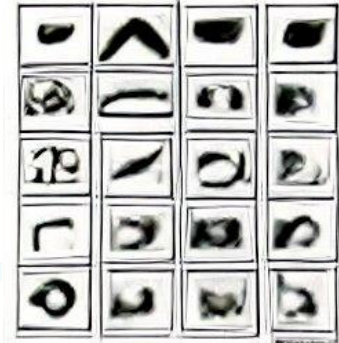
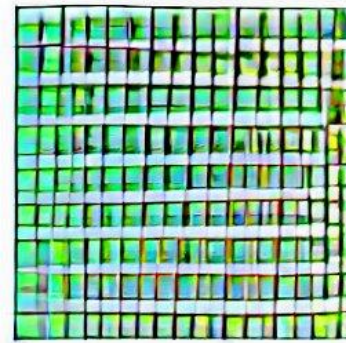
SLAC

CHARLES AND LISA SIMONYI FUND
... FOR ARTS AND SCIENCES ...

LSST
CORPORATION

What isn't this?!

- ★ Not a guide or overview to Rubin branding, styles or UI components
- ★ Not an exhaustive look at all of the kinds of UI & UX decisions we made and why
- ★ Not an opportunity to bad mouth bad UI & UX
- ★ Not a set of secrets that'll fix all of your UI & UX woes



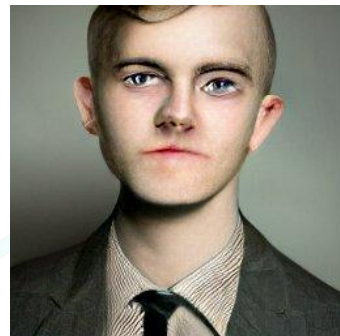
What is this?!

- ★ High level overview of Rubin EPO's approach to software development and UX
- ★ Open discussion of UI & UX parallels between software for learning and doing science
- ★ Opportunity to list our UI/UX hopes and dreams for future EPO and Rubin software development
- ★ A presentation where all the graphics were generated by DALLE MINI



Does He Even Know What He's Talking About?!

- ★ Blake Mason Lead Software Engineer for Rubin EPO
- ★ Frontend Web Developer with 10 years experience
- ★ Still Learning



Terms and Conditions: Apps

- ★ Web Apps
- ★ Phone Apps
- ★ Desktop Apps
- ★ Software with GUIs
- ★ Software without GUIs (say whhhhhhhhhhat?)

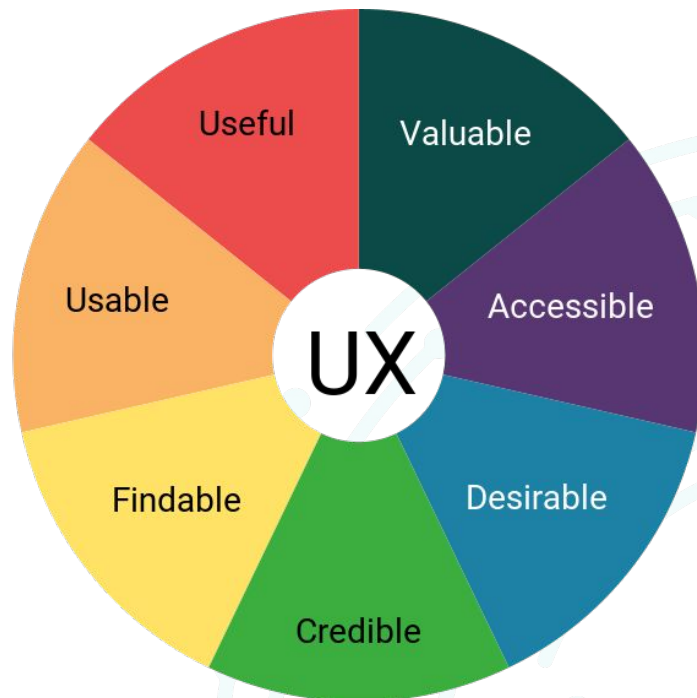
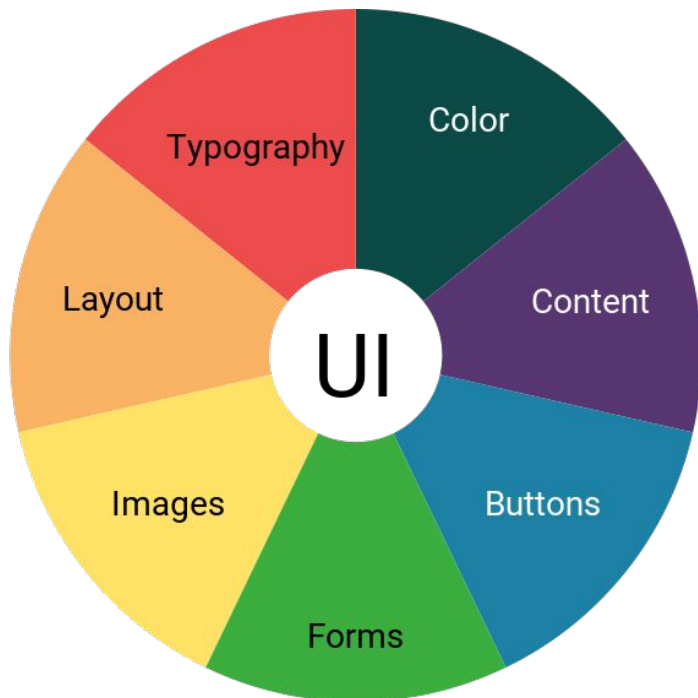


Terms and Conditions: Audience

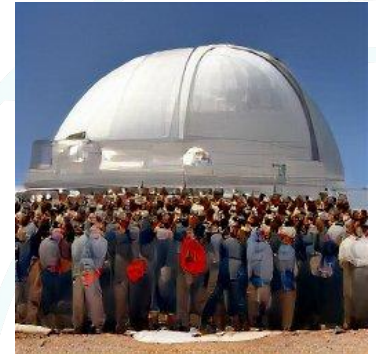
- ★ User research (Who are they?)
- ★ Personas (What do they care about?)
- ★ Usability Testing (How do they do stuff?)



Terms and Conditions: UI & UX



- ★ Is (already) interested in science & astronomy
- ★ Speaks English or Spanish
- ★ Most often uses the internet on mobile devices (phones, tablets, etc.)



Rubin EPO provides online data-driven experiences that are accessible and approachable, adding real-world context and opportunities for people to engage with Rubin Observatory and explore the Universe.



- ★ Friendly & inviting
- ★ Human & data focused
- ★ Interactive and engaging
- ★ Accessible across devices

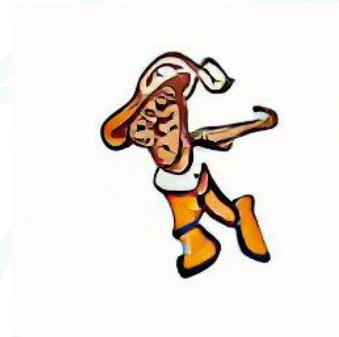
Rubin EPO provides online data-driven experiences that are **accessible and approachable**, adding **real-world context** and opportunities for people to engage with Rubin Observatory and explore the Universe.

- ★ Highly legible
- ★ Familiar flows and interactions
- ★ Data visualizations
- ★ Narrative content
- ★ Fast and simple

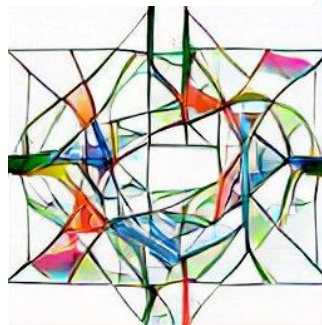
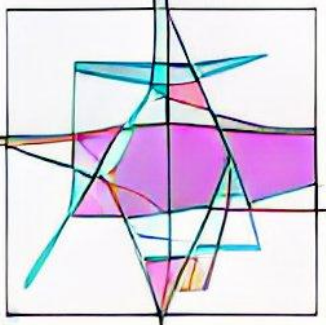
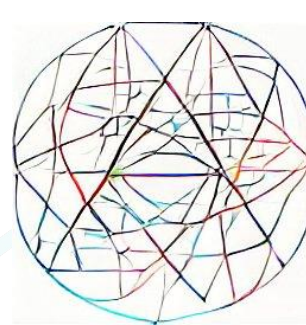
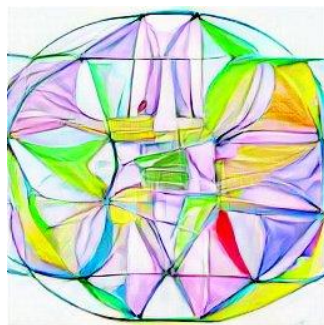
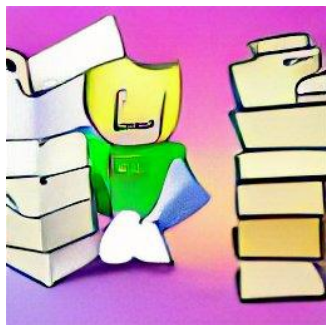
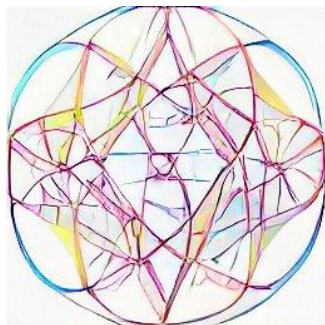
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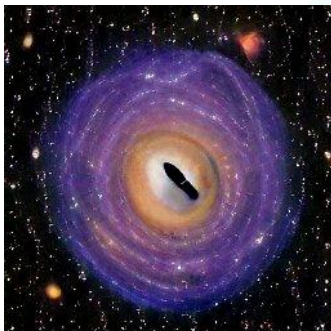
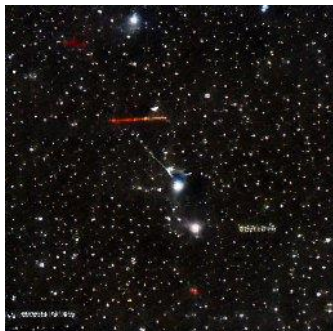
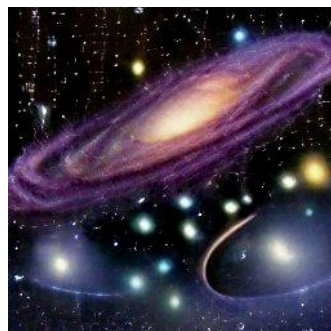
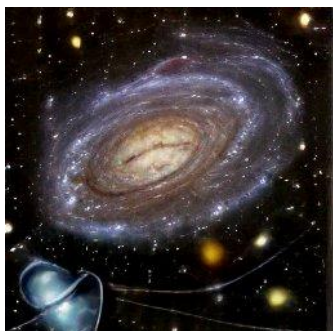
Sure, But Then What?!

- ★ Extreme User Empathy
- ★ Using trusted people's existing work
- ★ Focussing on creating the Minimal Viable Product (MVP)
- ★ Test it
- ★ Incremental & Bigtime changes

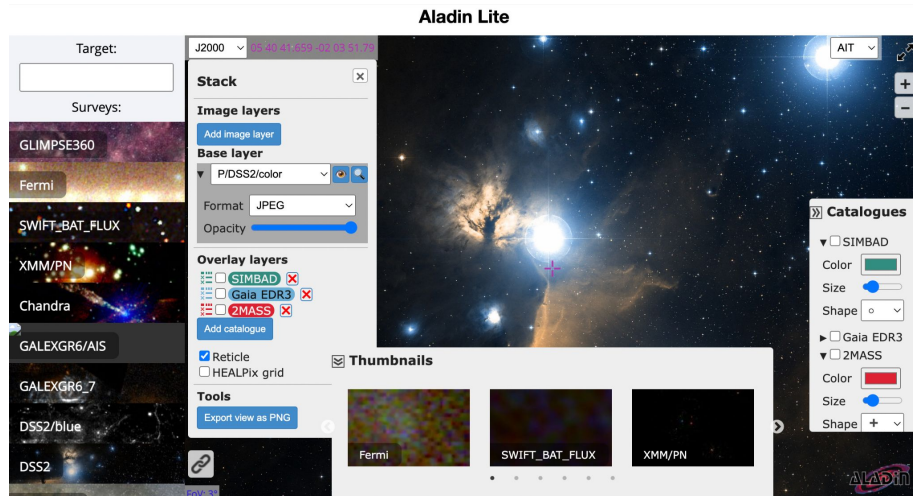


What does all this mean?





Skyviewer: Stuff that's like it



Skyviewer: Should we just use that then?

On a scale from: Meh ————— ish ————— heck yah

Highly legible? **-ish**

Familiar flows and interactions? **yah-ish**

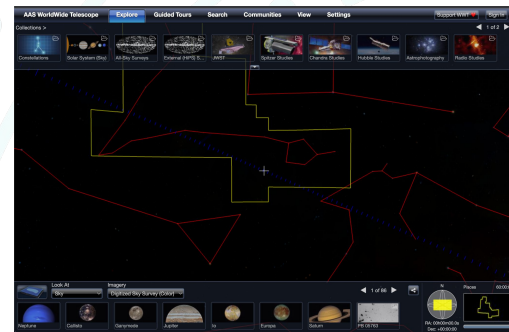
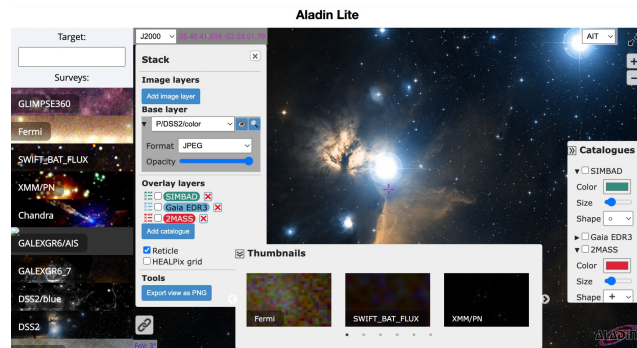
Fast and simple? **meh**

Friendly & inviting? **meh-ish**

Human & data focused? **heck yah**

Interactive and engaging? **heck yah**

Accessible across devices? **-ish**

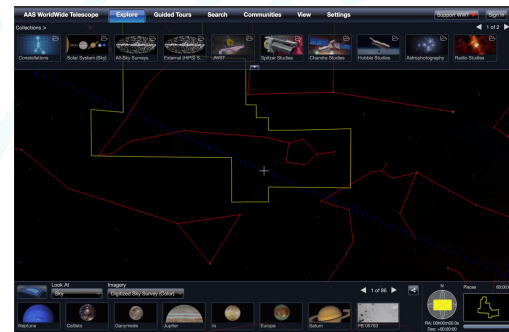
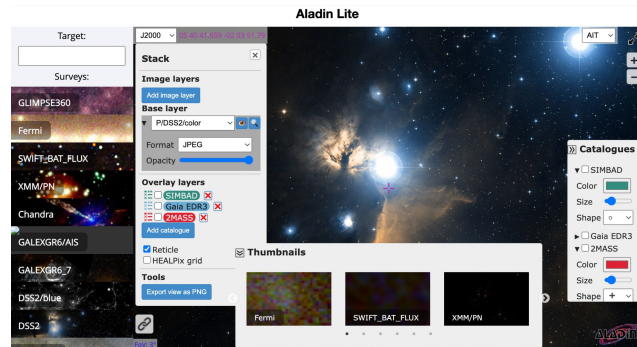


Skyviewer: Should we just use that then?

On a scale from: Meh ——— ish ——— heck yah

-ish
yah
-ish
meh
meh-ish
heck yah
heck yah
+ -ish

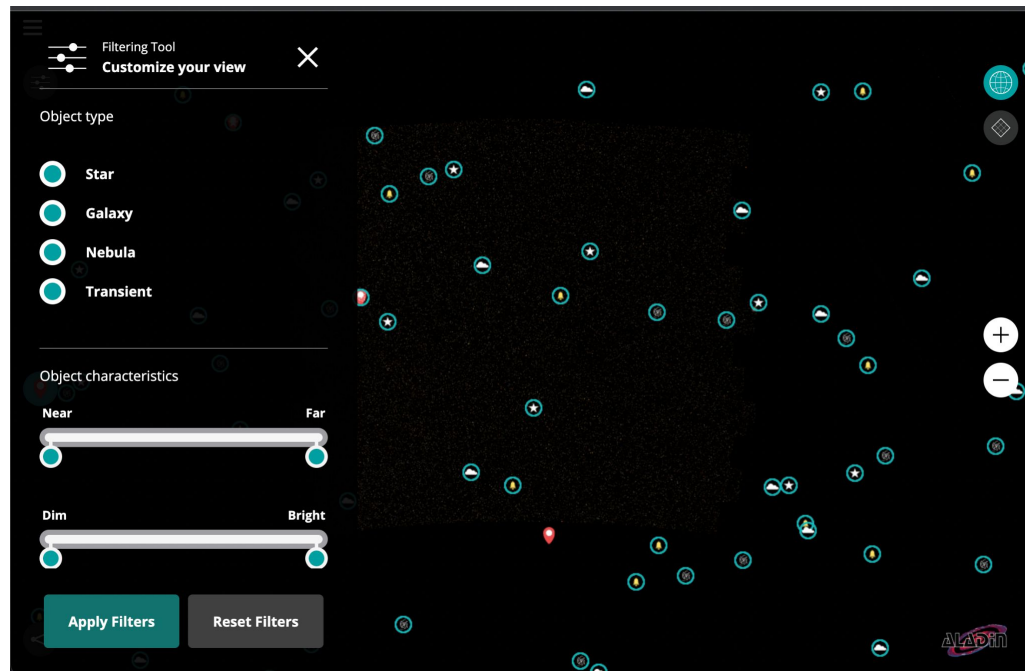
-ish(-ish)



Conclusion: room for improvement

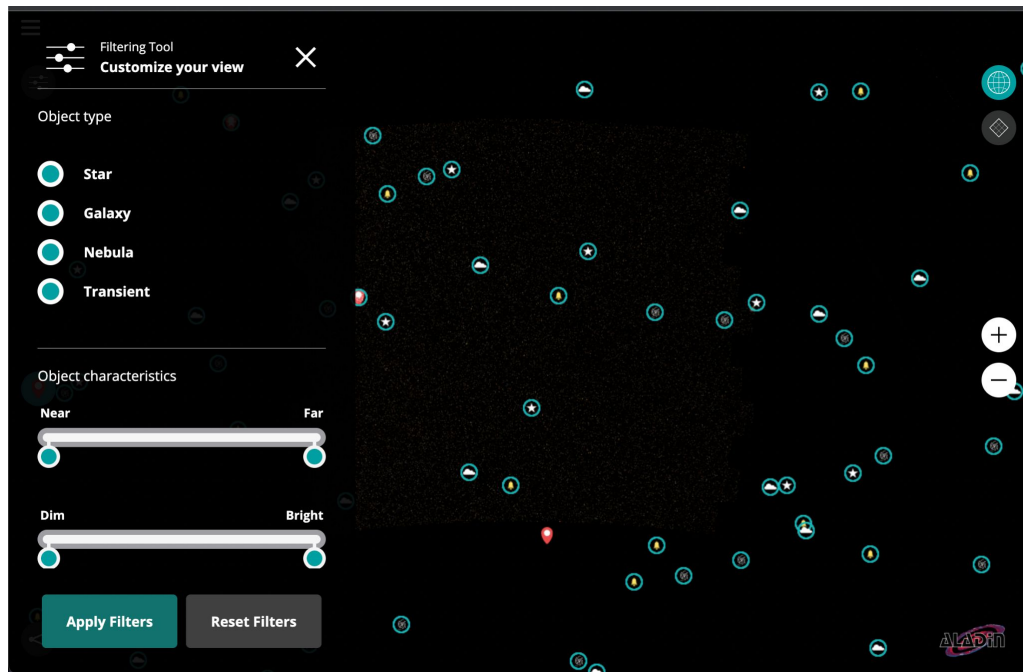
Skyviewer: How's it different?

- ★ More legible
- ★ More less
- ★ Flatter learning curve
- ★ More responsive/mobile-first
- ★ Friendly & familiar interfaces



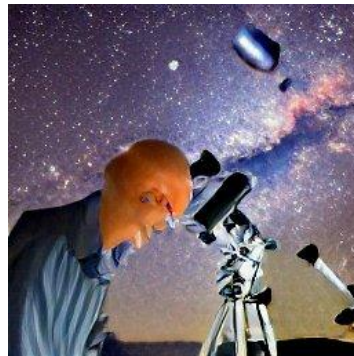
Skyviewer: Does it work for our Audience?

- ★ Accessibility & Usability testing
- ★ User metrics
- ★ Surveys
- ★ Research
- ★ Comparing to other stuff



Scientists are people too

- ★ Fancy design and thoughtful UI/UX aren't just for the public
- ★ Every audience has unique values worthy of consideration
- ★ Science is hard enough; software tools shouldn't make it harder to do science or become a scientist



!!!Audience Participation!!!

What are some astronomy softwares you use (apps, websites, CLI tools, etc.)? What do they do? Do they do it in a way that feels valuable, desirable, useful, satisfying, etc?

- ★ Stuff
- ★ Stuff
- ★ Stuff
- ★ Stuff
- ★ Stuff
- ★ Stuff
- ★ Stuff
- ★ Stuff
- ★ Stuff

What's next for Rubin software?

If EPO was building software for you, what would you want us to build? What kind of software do you think our audience would find valuable, desirable, useful, satisfying, etc?

- ★ Stuff
- ★ Stuff
- ★ Stuff
- ★ Stuff
- ★ Stuff
- ★ Stuff
- ★ Stuff
- ★ Stuff
- ★ Stuff

It's a Mess Out There

- ★ There's no one size fits all trick for good UI & UX
- ★ It's not easy
- ★ Creating effective software interfaces is for humans by humans
- ★ It's a very iterative process
- ★ It's worth it

But Wait, there's More

- ★ Project Keynote: Celebrating the Completion of the Rubin Education & Public Outreach Program **Thursday @ 9am (Plenary)**
- ★ Exploring the Solar System with Rubin EPO **Thursday @ 11am & 1:30pm (Tortolita D)**
- ★ All about NOIRLab Communications, Education and Engagement **Thursday @ 3:30pm (Tortolita D)**