Pariyatti Open Source

Intro: What did we do in 2020?

- I began working with Nishant on the Pariyatti mobile app back in December 2019 when I submitted a feature request on the Dhamma.org app and he asked in the reply “are you a software developer, by any chance?”
- We spent Q1 / Q2 2020 mostly researching, documenting, and looking for other volunteers.
- Q3 / Q4 (roughly) was spent building a prototype, demonstrating it to Renate, Nishant, and Brihas to make sure we were actually building something people wanted, and then beginning the project in earnest.
- As Nishant and Brihas know all too well, I talk too much. So I’ll try to keep this short. I’ll go fast; everyone can take notes and let’s do questions at the end?

Sila Service

Technology Roadmap

Sila and its difficulties

First Difficulty: Secrets are lies of omission

“Sila” is the answer to the question “why **open source**?”

Second Difficulty: Anything near Dhamma is delicate work ... but the process of creation tends to build ego. How to serve selflessly?

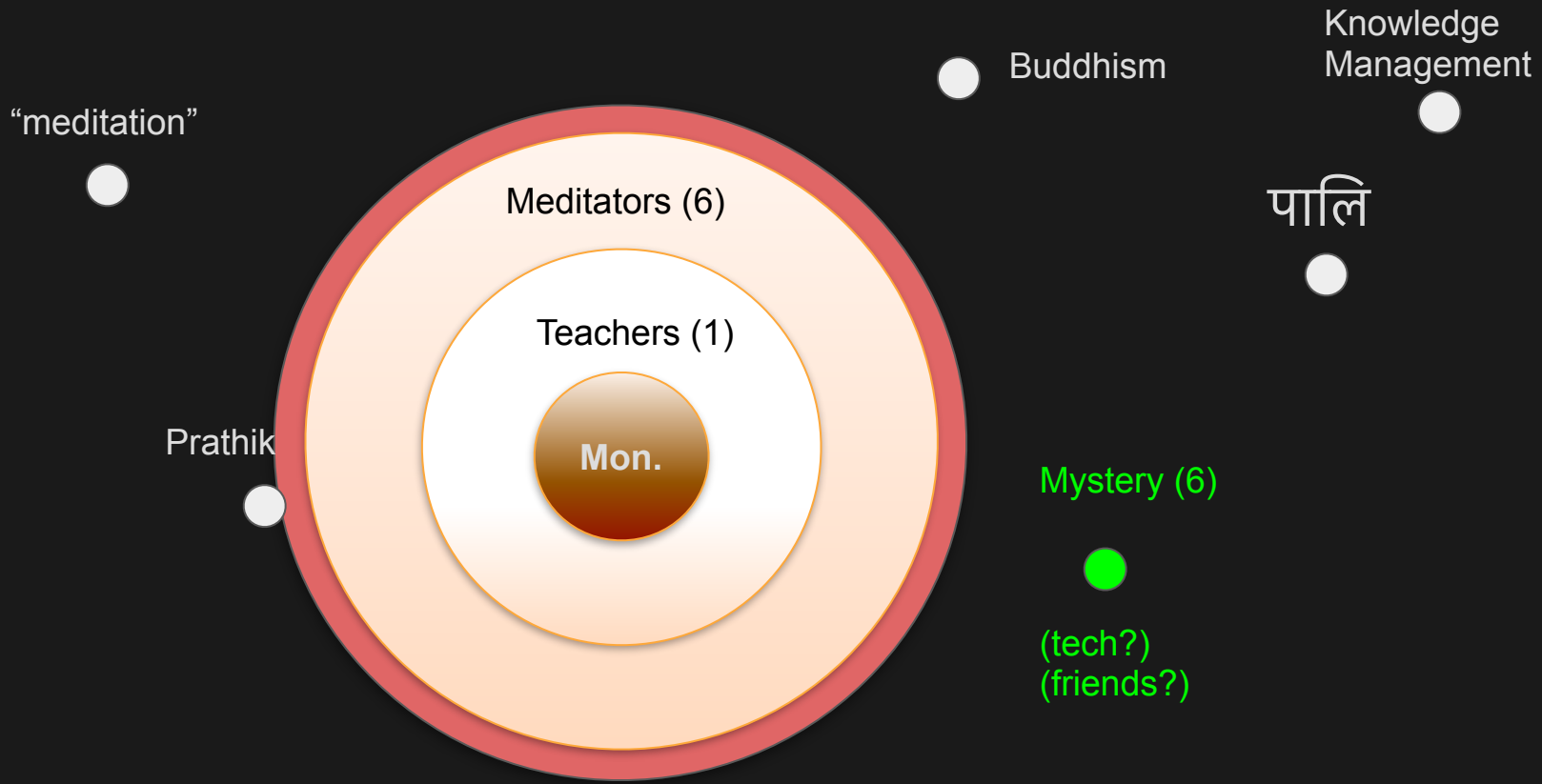
An (apparent) paradox: We need a deep sense of accountability without any sense of possession. This is **handover**.

(If there are questions about ethics, open source, or handover there are slides for the question period.)

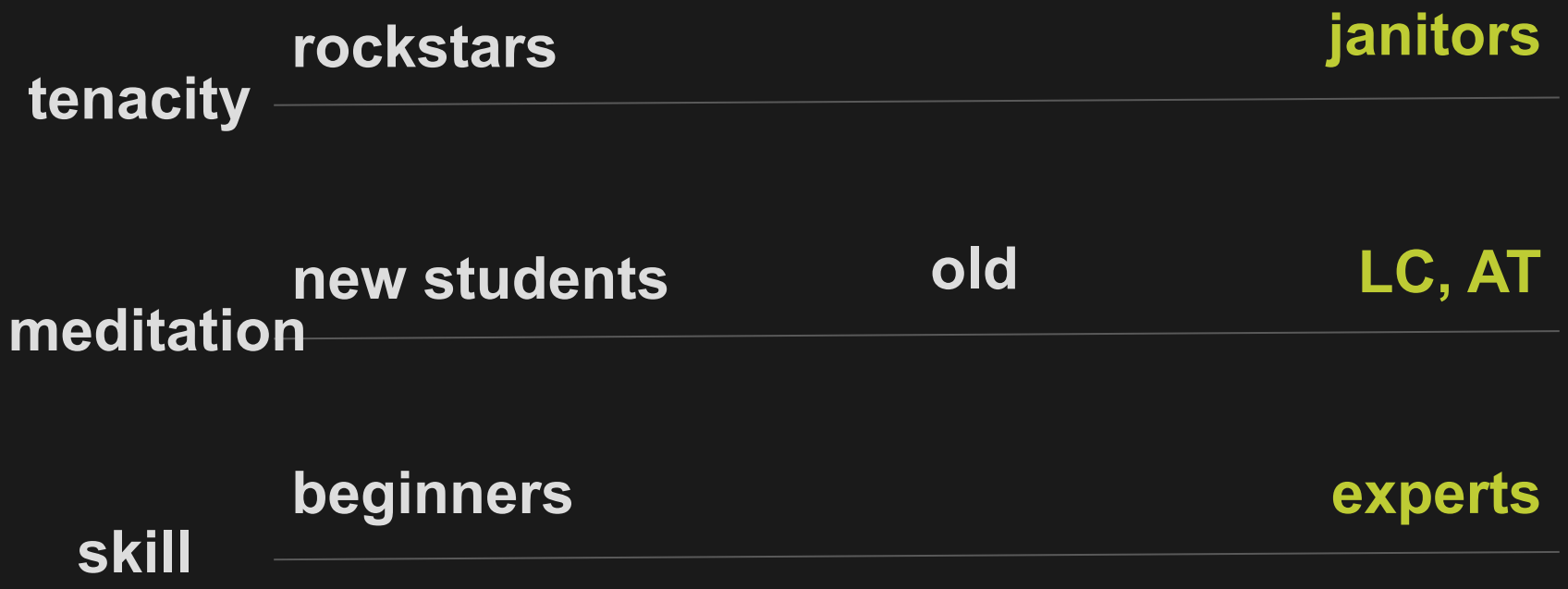
Service / Volunteering / “Staffing”

- (Forgive the terminology, please.)
- Surface area
  - Interesting project with many potential users
  - People are very excited to contribute to open source apps (vs. libraries)
  - Low-hanging fruit
- Explaining “what is this thing, exactly?” to non-meditators has been an interesting challenge
- “Open source” is not the same as “open contribution”
- Pariyatti staff provide guidance; contributions are controlled
- Our time frames are very long (historically and in terms of future action)
  - “If the sāsana is a 10-day course, the first day is over.”

Service & Volunteering



Staffing: x, y, z



Technology

- Mostly not important - changes too quickly to be interesting
- I'll let people ask questions rather than assume
- We prioritize avoiding expensive mistakes
  - My big mistakes: Python, Ruby on Rails

- *(1) Cross-platform mobile apps, (2) Time, and (3) Data Relationships* are the most important aspects we've researched and solved.
- Tabular --- **Document --- Graph** --- Triple Stores
- tipitaka.org: Triple Stores might be very valuable to tipitaka.org one day
- Given that pariyatti already spans 2600 years, it is important that the database understands *time* as a first-class entity, but ….
- We must remember that suttamayapañña is only (at best) proximate truth

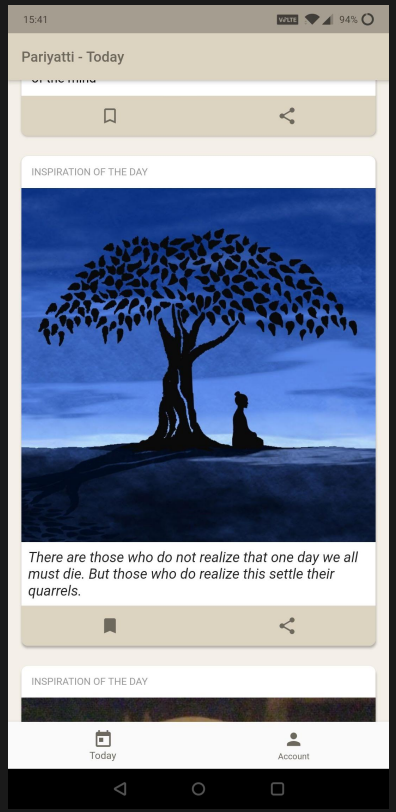
Roadmap Sidenote: Content

- “Not Wikipedia” (contrast WikiData and confusion from Yuvi, Prateek)
- Curated by Pariyatti

“Open” things can work two ways:

1. Open Source, Free Software, Open Data, Open Design (openly transparent)
2. Crowd-sourced contributions (open to modification)

We are the first but not the second.

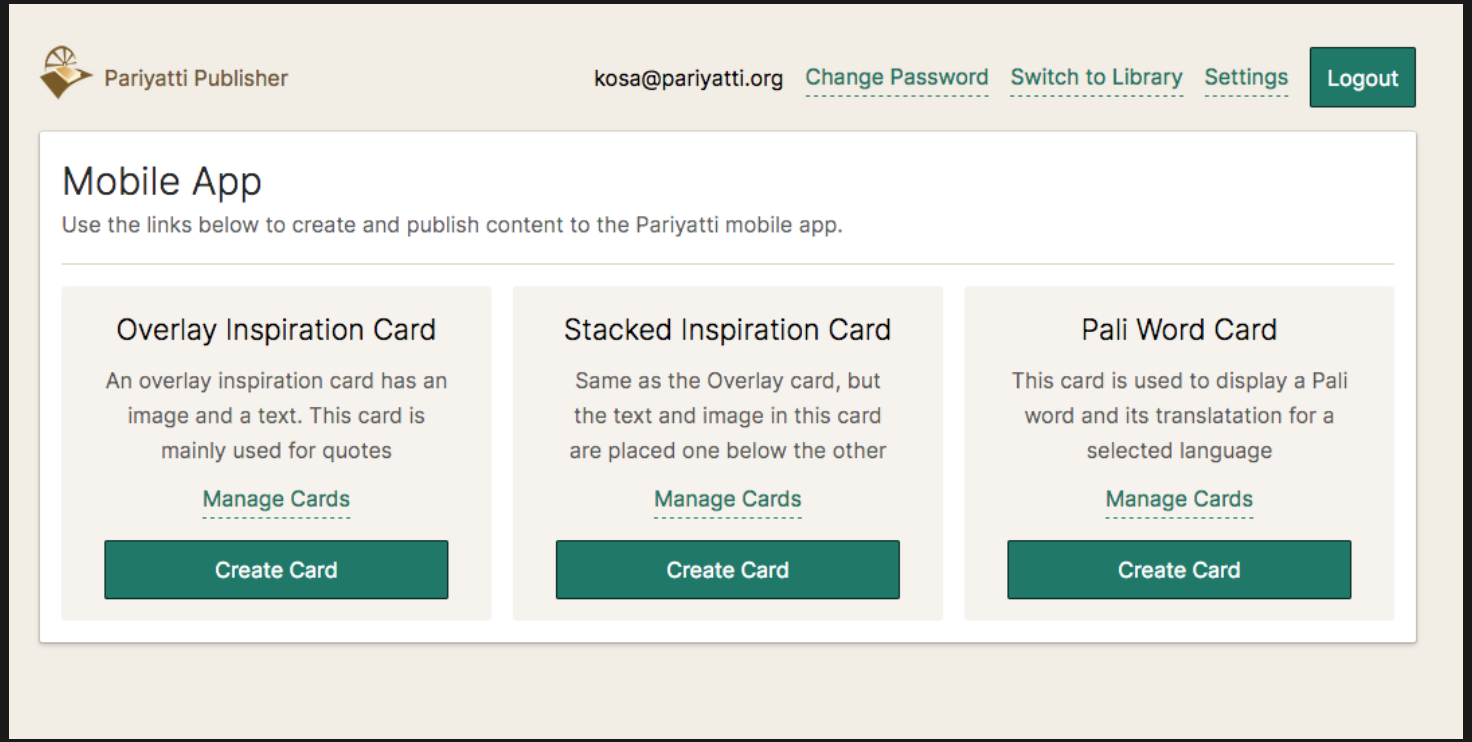


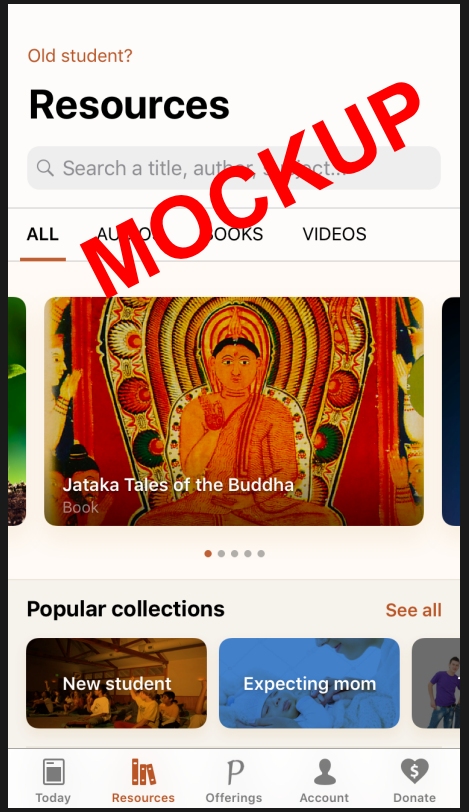
Roadmap: v1.0 - app

Rather out-of-date screenshot from the August demo. There are a number of colour fixes and other small improvements but the Flutter (app) team is currently working on some bigger changes like complete offline support.

The existing mobile app will largely suffice for our v1.0 target: feature parity with the “Daily Words of the Buddha” app. Most of the v1.0 work remaining is in kosa and some technical chores.

Roadmap: v1.0 - kosa





Roadmap: v2.0

All our data concerns will bear fruit here.

Small petition to rename the “resources” tab to “library”. ;)

Questions & Extra Slides

Open Source *

- Secrets are lies of omission
- There do exist *valid secrets*:
  - Passwords, keys, credit card numbers
  - AT evaluation criteria
- ...but there are no ethical reasons to keep source code a secret for publicly-available software
- “Open Source” and “Free Software” are just temporary contractual implementations of honesty (transparency).
- Transparency breeds correctness and helps with onboarding and handover. Handover is inevitable.
- ***Creation*** matters orders of magnitude more than ***consumption***

** Actually, “Free (Libre) Software” but that’s an unrelated philosophical discussion.*

Why “unethical”?

Reading a book to a child	Giving a book to a child
network	**source code**
binaries (programs)	

We are here to serve (in mundane life and in Dhamma). It is not up to us to arbitrarily withhold anything from others, regardless of how trivial it may seem on the surface.

Handover: Pragmatism and Egos

- Handover is “handing over the work [to someone else]”
- Inevitable: people will get bored, take on more work, or die
- We should do handover *continuously*, not when someone dies
- Full transparency eases handover

- It is very important that Pariyatti, the institution / 501(c)(3), owns everything:
  - Copyright: Pariyatti Contributor Agreement
  - Unless a bad actor takes control of Pariyatti, egos remain in check
  - When non-meditators make contributions, control of the project is clearly outlined

Time

- Good multi-generation bookkeeping is important
- Imagine storing facts across a timeline
  - Non-Pariyatti Example: “Why a lotus pond and not a parking lot?”
  - There are no perfect facts. Who remembered the “fact”? When was it documented?
- There are different notions of time:
  - Transaction Time: the time the computer understands the fact
  - Valid Time: the (contemporary) time humans agree they understand the fact
  - Origin Time: the (ancient) time the event originally occurred (discourse was given, document was written, etc.)
- We should try to be as accurate as possible but, again:
  - We must remember that suttamayapañña is only (at best) proximate truth
- Yes, “ancient time” and worrying about “suttamayapañña = proximate truth” seem like weird concerns for database design. But they are real concerns.