Who we are

Plentiful is a tech-forward non-profit with a mission to accelerate a connected food access ecosystem that prioritizes the needs of the individual. We achieve this by developing inclusive software applications that empower providers and partners to more effectively serve those facing food insecurity. Our solutions also enable people to access the food they need efficiently and effortlessly. This approach ensures a more dignified experience for everyone involved, leading to more human-centered outcomes. Our current user-facing products include:

- *Plentiful for Neighbors*: a free, easy-to-use tool for individuals to find, register for, and make reservations at local food pantries, soup kitchens, or other free food events. It is available via SMS or iOS, Android, and web apps in nine languages.
- *Plentiful for Providers*: this platform is for food access points (pantries, soup kitchens, etc.) to connect to the ecosystem. Providers can claim their profile and use tools for efficient line management through registrations or reservations, communicate directly with clients, and see and report on data insights about their program.

Plentiful is currently available in New York City, Colorado, and is in the process of expanding into New Jersey, Montana, and Texas, with more locations coming soon. The software engineering team is based in Metro Denver.

Read more at https://plentiful.org/

What the team will work on

The team will work on features towards our neighbor engagement product goal. The Plentiful Neighbor app allows neighbors to search for providers, and sign up for reservations at food pantry service providers. For providers that offer pre-registration/reservation-based services the app allows neighbors to complete forms ahead of a service (e.g. Colorado TEFAP), and input profile information, such as address, household details, and food preferences, all within the privacy of their own devices rather than while waiting in line.

We'd like to focus on increasing neighbor engagement with a bookmarking feature. This feature will allow logged-in neighbors to bookmark providers and/or services that they are interested in, enabling them to easily return to a provider's details without searching. Currently, the only way for a neighbor to "pin" a provider is by signing up for a pre-registration/ reservation-based service at the provider or by being added to a service by a provider. However, this excludes many neighbors who may be going to providers that don't support reservations, or who wish to bookmark a pantry before ever attending a service at that provider.

The beginning of the project will involve engaging with internal customer proxies to understand requirements and build a product backlog. The team will prioritize the items with the customer proxies, then develop in 1-week sprints to deliver usable increments and gather continuous feedback.

Neighbor engagement is an important part of what makes Plentiful unique, providing neighbors with a customized and dignified experience with the food access system. Bookmarks are another tool that furthers customization and makes Plentiful more valuable for neighbors in all situations, especially as we expand our reach.

For a team delivering ahead of schedule, there will be other opportunities to build upon this work and further engage with neighbors, such as allowing feedback on provider services, correction of service listings, and crowd-sourced data options. Teams will have the opportunity to be Agile and iterate on these improvements based on their time and learnings from previous iterations.

What we will expect from the team

We will expect a communicative, curious, and Agile-minded team ready to build something valuable. The following is a general list of the tools and services we use. Proficiency in these tools is not required, but we hope this project is an opportunity to gain hands-on, practical experience with a subset of them.

- React
- React Native / Expo
- JavaScript / TypeScript
- MySQL
- Scripting (bash)
- AWS (CloudWatch, ECS, Lambda, etc.)
- GitHub
- Primary AI Toolchain: Claude (Code)

Given the fast-paced nature of summer field session, teams will be expected to attend three kinds of regular meetings:

- **Standups** (~daily) *with one of our engineers*. Teams will engage with a standard scrum standup meeting, focusing on identifying changes, problems, and blockers.
- **Sprint demos** (once per week) *with broader stakeholders (other engineers, customer proxies, product owners)*. Plentiful engineers present will step away from mentorship (and possibly into a stakeholder role) to let the team own the meeting.
- **1-on-1 mentoring** (once per week) *with one of our engineers*. Team members will meet individually with an engineer to talk about anything project-related, including but not limited to Agile/scrum, software development, technical challenges, and team relationships. 1-on-1 mentoring is something we practice internally and strongly believe to be an important part of any organization. Individual growth is important to us, and we are excited to engage and learn from each team member.

We will expect the team to own their Agile processes, using it to deliver something of value for Plentiful stakeholders (under guidance, of course; see below).

Throughout the session, teams should feel empowered to ask questions, both technical and Agile-related. Teams should expect interactions like code reviews and whiteboarding sessions on concepts they need help with.

Plentiful requires that students participating in this project assign all intellectual property in their work to Plentiful. Similar to how the organization engages with independent contractors, students will be asked to execute an assignment agreement to confirm their disclosure of work and assigning rights to Plentiful. We will also ask students to confirm that their work product does not infringe on any third-party intellectual property rights.

What the team can expect from us

We want to provide the best, most career-focused experience possible. We know just how overwhelming the software industry feels right now, especially with AI tools spreading and changing rapidly. (We are figuring out how to use these tools effectively too!) So, we will be pushing the team to strengthen their *project management* and *Agile* skills, as well as robust *engineering* and *operational excellence* skills. Mentorship will be provided in these topics, as well as any others requested by the team.

We hope to strike a balance between autonomy and mentorship. Agile is best learned by applying it in practice (hence why CS@Mines teaches it during *field* session). We know this may be many students' first time implementing Agile methodologies in a practical

setting, so the team can expect guidance along the way. Every week the team can expect feedback on not only their software but also their project management. We hope each sprint/iteration incorporates feedback to show progress in software quality, project management processes, and Agile learning objectives.

Preferred team size

3-5

Where the team will work

Teams will mostly work remotely, joining meetings via Zoom. Some in-person meetings with customers/stakeholders and the engineering team will be arranged as needed throughout the session.