



**Company Background:** DECTech

**Team Size:** 3-5 Students

**Location:** Either remote on Zoom or in-person.

**Program Background:** [DECTech](#) (Discover, Explore, Create with Technology) is a CS@Mines outreach program offering after-school STEM classes to girls (grades 3-12) during the school year and summer camps for all genders. Over 5,000 students have attend DECTech camps and classes since 2013. The program is a springboard to attending Mines and promoting STEM among students from underrepresented groups in computing. Many Mines undergrads who intern as DECTech curriculum developers, TAs, and instructors decide to pursue teaching careers.

**Project Summary:** Unfortunately, the registration process for ~600 parents each year is highly labor intensive utilizing Google forms, lots of email, and Remind app communication. DECTech needs a website and/or mobile app with built-in registration processes, automatic parent communication features, and consent form monitoring capabilities. The site should protectively store and manage data AND process payments.

This team will analyze a viable registration and payment model, either with a previously configured registration and database or with the Mines registration/payment service. Ideally, the team would construct or work with the Mines department to construct the registration/payment site, integrate the new system into the existing website, and test all features.

**Key Skills/Technologies:**

- Working with spreadsheets (also familiarity with Google Sheets)
- Building databases
- Building an app (preferably experience with Flutter or some other cross-platform software)
- Making a Website (programming languages: html, css, php, Javascript)
- Creativity
- Constant communication with client and client's team since the program will be ongoing and require strategic deployment of the application(s)
- Test driven development

**Student Benefits:**

- Freedom to develop creative solutions to the problems.
- Future paid internship opportunities
- Build leadership skills by seeing the project through to completion.
- Opportunity to work on a project that is high impact and can make a difference

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