CyberTracker Mobile Client ArcGIS Integration

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Project Goal

- Integrate CyberTracker Mobile Client with ArcGIS

CyberTracker

- Platform for data capture applications
  - Earth Ranger
  - SMART
  - CyberTracker
  - ArcGIS

- Built using Qt
  - Platform independent like Java

- Started in the 90's

- Icon based interface
  - Used by Kalahari Bushmen

- Conservation

ArcGIS

Geospatial Services
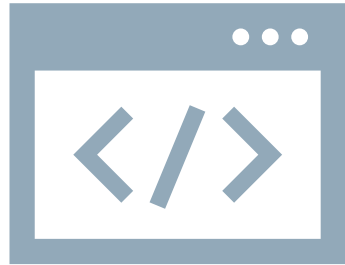
Viable Backend

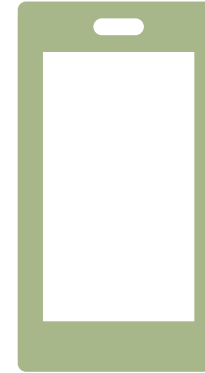**Conservation Grant**

Monetary Benefit

Large Userbase

Expand CyberTracker

Accomplishments

Created a third-party UI which can create projects hosted on ArcGIS that are usable by ArcGIS Mobile Client

Create a specific case to handle ArcGIS integration on the mobile client

UI

Layer Name   Layer Icon

Demo   Browse...   No file selected.

Search   [   ]   Clear

Layers   Description

Demo.zip   No description

Field Name   Field1

Field Type   String

Field Icon   Browse...   No file selected.

List Value   Item1   Delete

List Image   Browse...   No file selected.

List Value   Item2   Delete

List Image   Browse...   No file selected.

Add Item   Delete Field

Field Name   Field2

Field Type   Integer

Field Icon   Browse...   No file selected.

Add Item   Delete Field

Field Name   Field3

Field Type   Double

Field Icon   Browse...   No file selected.

Add Item   Delete Field

Add Field   Create New Layer   Delete All

ArcGIS

- Creates Feature Layer

☐ 🏷️ Demo   Feature Layer (hosted)   🔒   ☆ ⋯   Dec 14, 2020

- Creates Project Zip

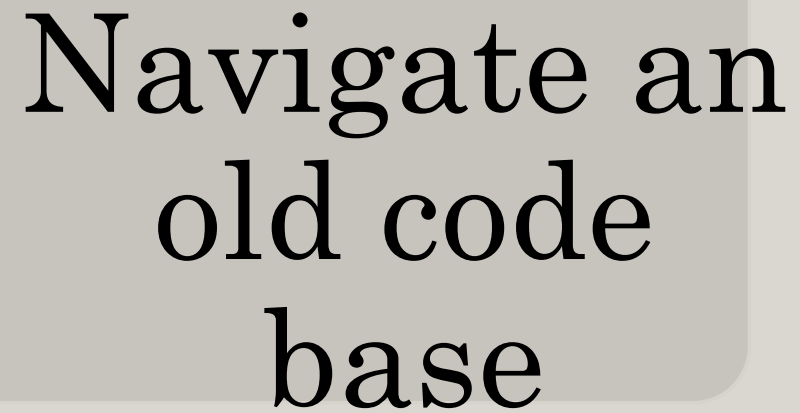☐ 🗺️ Demo.zip   🔒   ☆ ⋯   Dec 14, 2020

CyberTracker Mobile Client
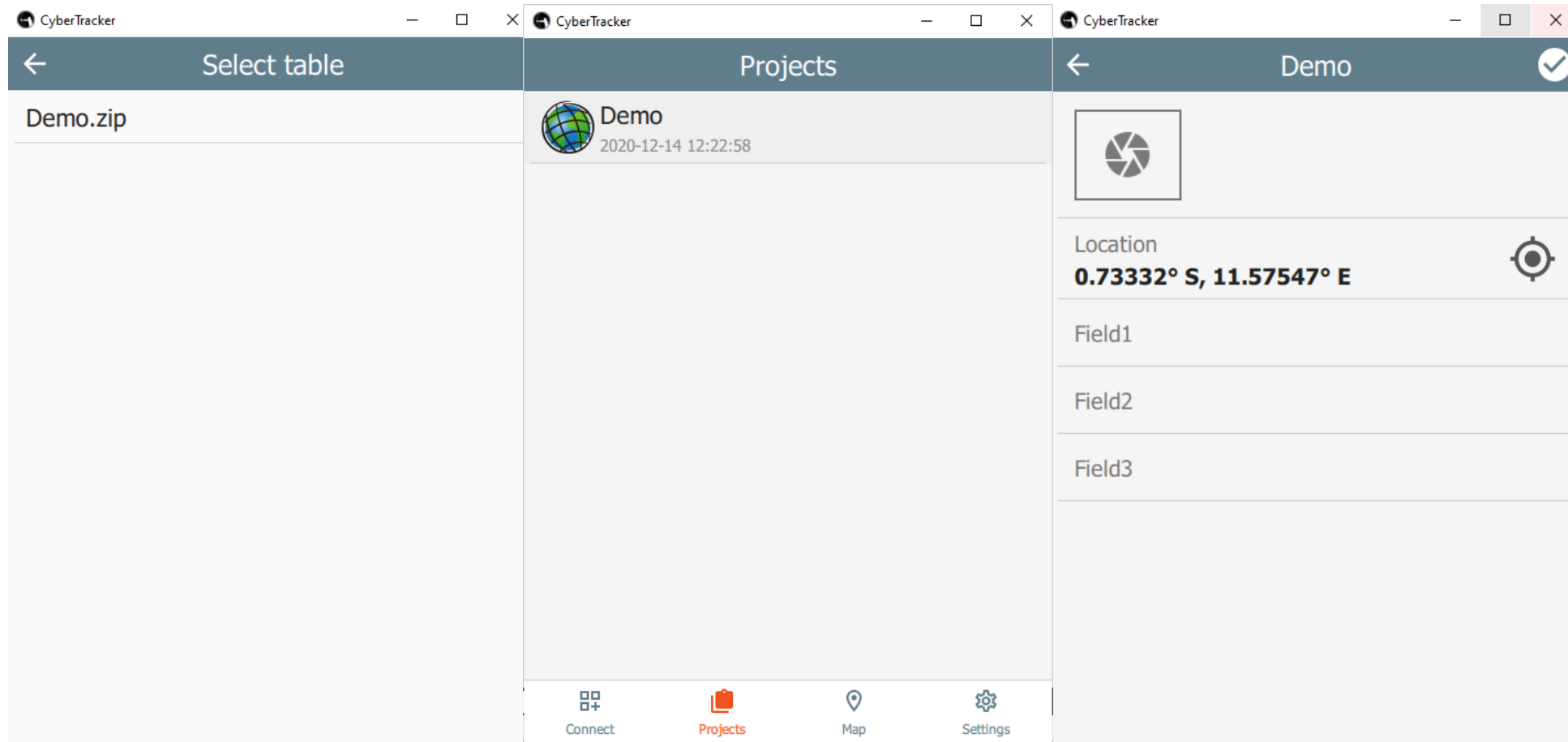
Learning Technical Skills

- JavaScript
  - Mithril
- HTML
- CSS
- Qt
- ArcGIS REST API
- GitHub
- Azure Static Website

Learning Soft Skills

Navigate an old code base

Work with other people

What I Liked

Seeing a large project come together

Learning new tools

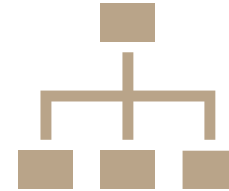Working on something I'm passionate about

What I didn't Like

Minimal documentation on code base

No tests on codebase (UI are notoriously difficult to make test cases for)

Undeveloped workflow (Organization is very small)

Courses

CSS 350 CSS 360 CSS 370 CSS 342

CSS 343 CSS 430 CSS 434

Pitfalls

Ask more questions

Reach out when stuck

Create new documentation

Learn tools before studying code base (Qt and SQL)

Questions