

MICHIGAN STATE

U N I V E R S I T Y

Beta Presentation

Learning New Train Routes

The Capstone Experience

Team Union Pacific

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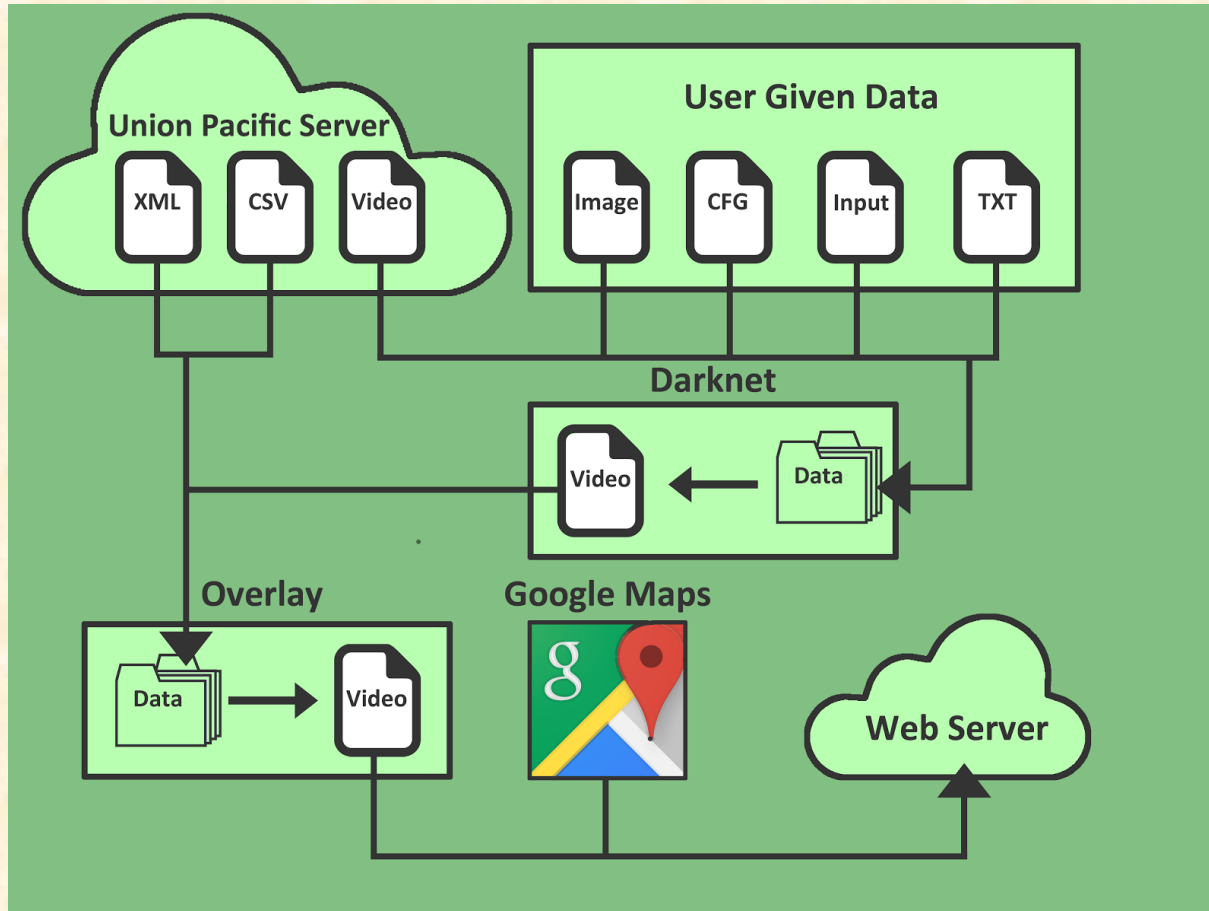
*From Students...
...to Professionals*

Project Overview

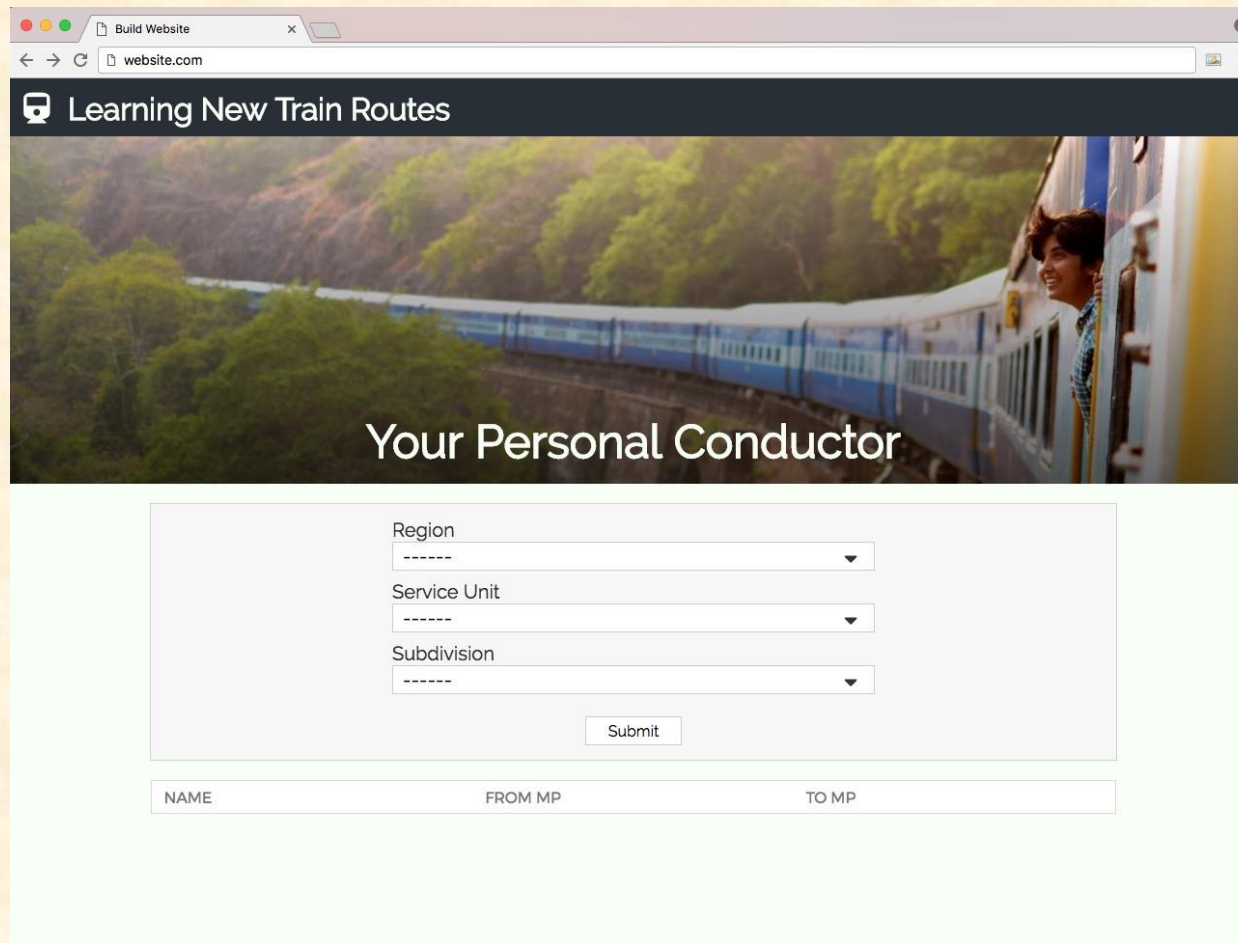
- Problem
 - Training costs millions every year
- Solution
 - Create AR experience
 - Overlay track information
 - Recognize signals and switches
 - Put on web app



System Architecture



Homepage



The screenshot shows a web browser window with the following elements:

- Browser tab: Build Website
- Address bar: website.com
- Header: Learning New Train Routes (with a train icon)
- Main image: A blue and white train traveling through a green, hilly landscape. A person is visible leaning out of the train window.
- Text overlay on the image: Your Personal Conductor
- Form area (light green background):
 - Region: [-----] ▼
 - Service Unit: [-----] ▼
 - Subdivision: [-----] ▼
 - Submit button
- Table header (white background):

NAME	FROM MP	TO MP
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Homepage Results

Learning New Train Routes

Your Personal Conductor

Region
Michigan

Service Unit
MSU

Subdivision
MSU1

Submit

NAME	FROM MP	TO MP
MSU Part 1	1	0
MSU Part 2	1	6
MSU Part 3	1	9
MSU Part 4	1	3
MSU Part 5	0	2
MSU Part 6	1	6
MSU Part 7	1	4
MSU Part 8	1	100

Video Page

The screenshot shows a web browser window with the following elements:

- Browser tab: Build Google Maps
- Address bar: website.com/video
- Page title: Learning New Train Routes
- Section title: MSU Part 1
- Video player interface:
 - Buttons for Video and Map View.
 - Video player controls including a play button, a progress bar (3:06 / 4:59), and a volume icon.
 - Video content: A first-person view of train tracks with two signal posts. Each signal post is highlighted with a green box and labeled "Standing_Signal".
 - Map view thumbnail: A small map icon with a red location pin and the number "1.02".
 - Distance: 3.46
 - Mile Post: 5.02
 - Speed: 60mph

Map View

Build Google Maps X
website.com/video

Learning New Train Routes

MSU Part 1

Video | Map View

Map Satellite

Legend

- Signal
- Switch

Map data ©2017 Google Terms of Use Report a map error



What's left to do?

- Clean up UI
 - Website
 - Video
- Add distance ruler to icon bar
- Compensate for XML/CSV inconsistencies
- Code cleanup



Questions?

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