### MICHIGAN STATE UNIVERSITY Beta Presentation CATAlyst: Mapping CATA Routes and Buses in Real-Time

#### The Capstone Experience

#### Team Michigan State University

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Department of Computer Science and Engineering Michigan State University

Spring 2017

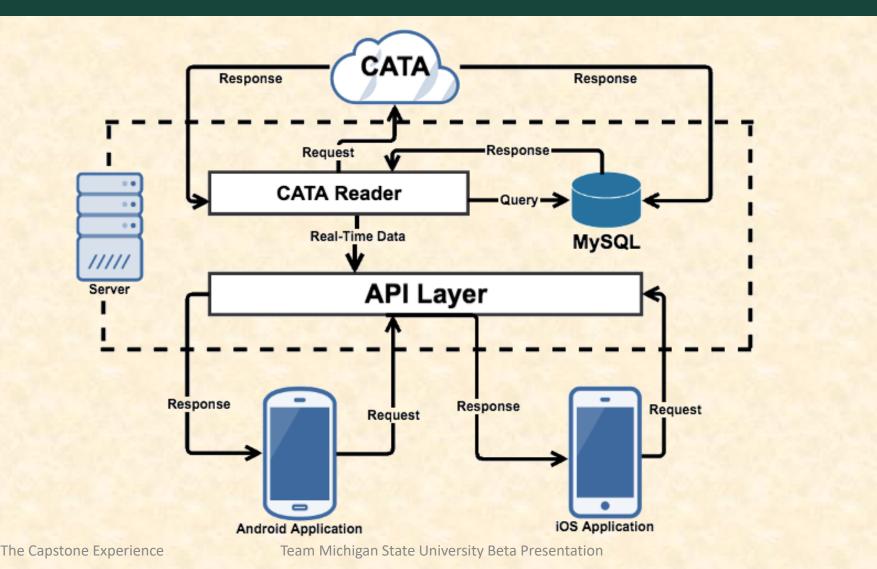


From Students... ...to Professionals

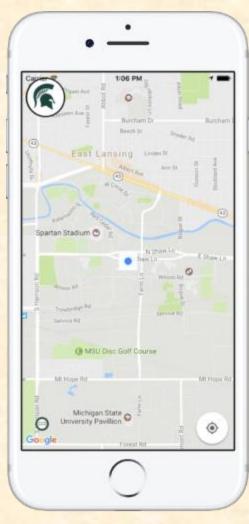
#### **Project Overview**

- User's can access real-time CATA bus locations, stops and routes
- Schedules can be entered
  - Local Notifications
  - The fastest route to their destination

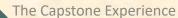
# System Architecture



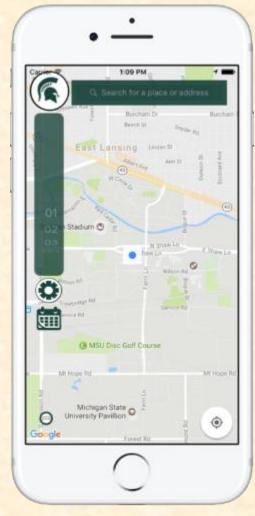
# **Home Screen**







# **Route Filtering Drop-Down**





# Search Functionality Auto Complete

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# Schedule Input

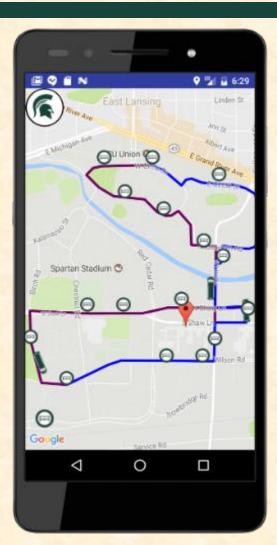
Image: Constraint of the second s	Class Start Time 9:10 am Class Name PHY 183 Your Initial Location *Leave blank to use current Wilson, 219 W Class Location 567 Wilson Rd	n ticcation ilson Rd, Ea	<ul> <li>Monday</li> <li>Tuesday</li> <li>Wednesday</li> <li>Thursday</li> <li>Friday</li> <li>Saturday</li> <li>Sunday</li> </ul>
Save	⊲	SAVE	

# **Local Notifications**

Carrier ♥ 2:59 Wednesday, March 29	AT&T 1983 # 4 6% D 11:13 Mon, April 3
CATALYST Im ago Leave in 10 minutes for CSE 231 It will take 5 mins to walk to your stop. Total trip time: 14 mins. Origin: Hubbard Hall Destination: Wilson Press for more	CATAlyst 11:12 PM Leave in 10 minutes for CSE 498 It will take 7 min(s) to walk to your stop. Total trip time: 16 min(s). Origin: Hubbard Hall Destination: Wilson Rd
Press home to open	And the same that your finger covers the entire Home key

# **Route Highlighting**

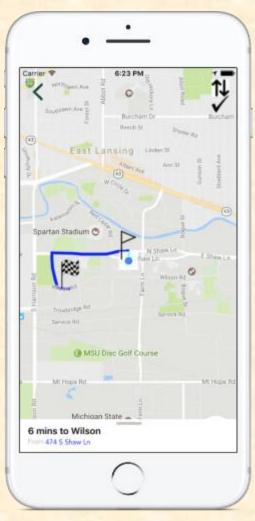


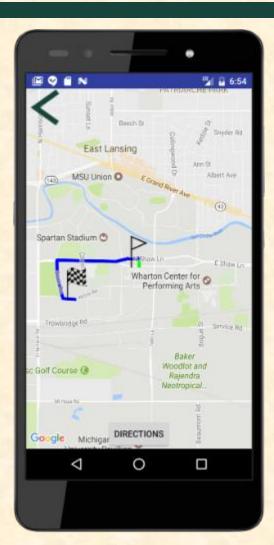


# **Directions List**

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6 mins to Wilson	Ruletam	Total: 6 1.0 mi From: 474 \$ Si	mins to Wi	son
2 mins 423 fe Walk to WSD Shaw before Red Cadar Rd	×	2 mins		Ż
4 mins 1.0 mi Route: Bus towards 33 Holden Halls - South Campus Board at WBD Shaw before Red Ceder Rd (4 stops) Exit at EBD Wilson before Chestnut		4 mins	Shaw before Red Ce 13 Holden Halls - So	Ģ
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# **Visual Route Directions**





# What's left to do?

- Scaled testing
- Bug fixes
- Project Video

## **Questions?**

