2021 FIRST California Workshop Series:
PRODUCT DEVELOPMENT + DESIGN THINKING

Session 6: User Testing

February 20, 2021

FIRST CALIFORNIA ROBOTICS

Theresa Bateman

FIRST Regional Director,

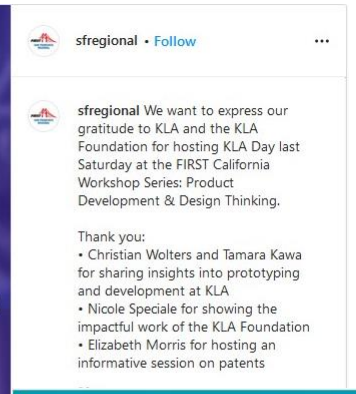
Greater San Francisco Bay Area

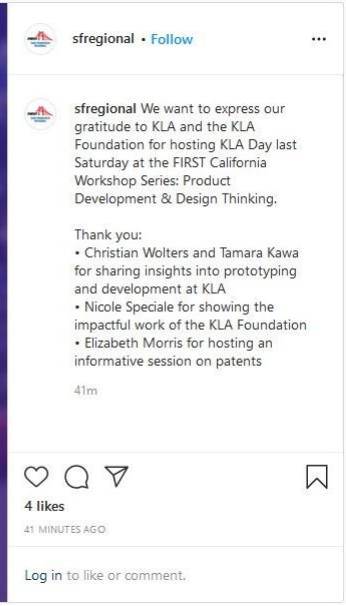
FIRST CALIFORNIA ROBOTICS

Session 6 User Testing

Time	Agenda Item	Presenter
10:00 - 10:10am	Welcome & Session Recap	Theresa Bateman, FIRST
10:10 – 10:50am	Design Thinking – Test	Divya Nagaraj, Stanford Sidra Nadeem, Stanford
10:50 – 11:50am	Overview of Lyft Bikes, Qualitative & Quantitative Testing at Lyft	Nadia Eldeib, Lyft Brady Law, Lyft Varna Vasudevan, Lyft
11:50 - 12:00pm	Wrap up and Q&A	Theresa Bateman, FIRST

Session 5 Fun





2021 FIRST California Workshop Series:
PRODUCT DEVELOPMENT + DESIGN THINKING

Identify the Opportunity	Generate Ideas	Evaluate Ideas & Filter	Determine Business Strategies	Develop the Idea	Product Trial
• Evaluate the Innovation Challenge Criteria • Design Thinking - Empathy & Define • Problem Statement • Intellectual Property intro	• Design Thinking - Ideate • Brainstorming • Diversity & Inclusion of Ideas	• Product Design Specification • Concept Sketches • Pugh Analysis Matrix • SWOT Analysis • Market Analysis	• Strategy for Startups • Product-Market Fit • Value Proposition • Innovation S-curve • Prepare the Pitch	• Design Thinking – Prototype • User Experience • Design Engineering • Reliability • Manufacturability • Patents	• Design Thinking - Test • Test/Experiment Design • A/B Testing • Qualitative Testing • Quantitative Testing
Jan 9th, 1-3pm	Jan 16th, 10am-Noon	Jan 23rd, 10am-Noon	Jan 30th, 10am-Noon	Feb 6th, 10am-Noon	Feb 20th, 10am-Noon

Teams are invited to connect with a ***Team Advisor*** and join a ***Pitch Party***. ***FIRST* Regional Directors** will provide details.

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https://cafirst.org/california-leadership/

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More About Velma

Session 5 Recap

- **Prototype & Development Strategies**
  - Design Thinking - Prototype to **gain empathy**
  - Prototype quickly to **fail fast and iterate**
  - **Scenes/Props/Roles** sets up the test environment
  - High resolution prototyping considers **manufacturability/reliability**
- **Homework**
  - Develop a working prototype
  - Determine where & how to test your prototype, using Scenes/Props/Roles
  - Run low stakes testing to confirm the solution

Divya Nagaraj & Sidra Nadeem

Stanford University Students

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Nadia Eldeib, Brady Law & Varna Vasudevan

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Session 6: User Testing

wrap-up and closing of

2021 FIRST California Workshop Series

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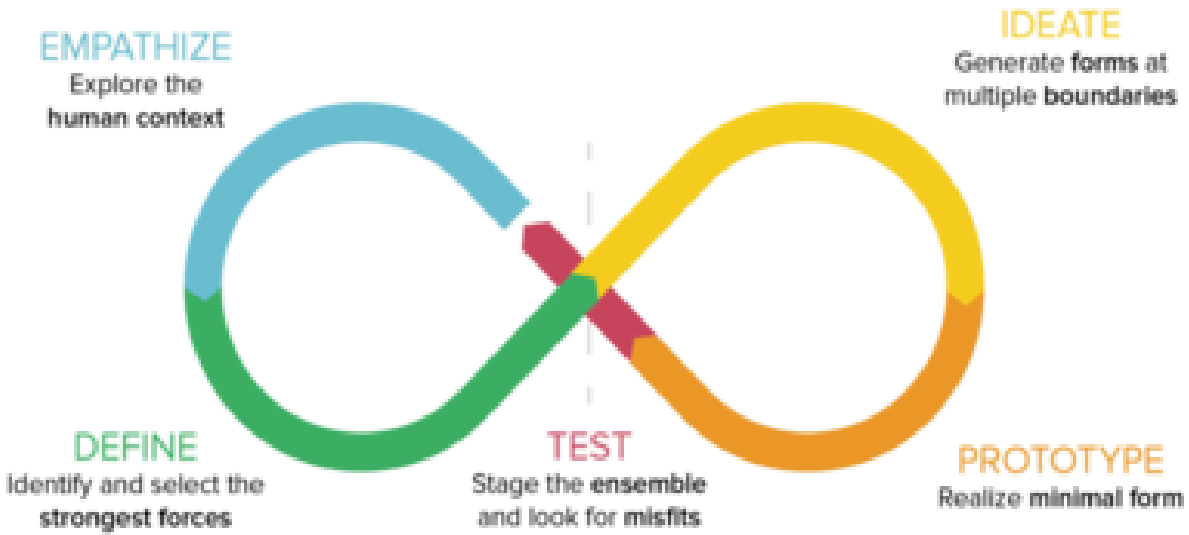
Series Wrap Up

- **Homework**
  - Identify research questions & hypothesis
  - Draft a test plan
  - Conduct user testing & iterate



- **Award Submissions Dates**
  - Innovation Challenge: March 4th
  - Game Design Challenge: March 4th

Noon Pacific Time!

Additional Resources

- ***FIRST CA Workshop Series***
  - Session replays and slides available at https://cafirst.org/product-development-design-thinking/
- ***FIRST* Innovation Challenge Content Series**
  - Webinars and replays available at https://info.firstinspires.org/innovation-content-series

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