

# RESEARCH, REFLECT, SHARE: DOCUMENTING DESIGN THINKING

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Culver City, California, USA  
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# ABOUT ECHO HORIZON SCHOOL



- ▶ Independent School in Culver City, CA
- ▶ 180 students PK-6 (ages 4-12)
- ▶ 12% of students are Deaf and Hard of Hearing (in the mainstream classroom)
- ▶ emphasis on strong academics, character education, creativity, and critical thinking
- ▶ technology integrated throughout curriculum
- ▶ access to visual art, music, and dance theatre
- ▶ design thinking and making

**WHY MAKERSPACE?**

**WHAT DO THEY MAKE?**

**THEY SEW**

**THEY PROGRAM**

**THEY CONSTRUCT**



**DECISIONS**



**WHY DO THEY MAKE?**

**EMPATHY**

**WHAT IS DESIGN  
THINKING?**

## A DECISION MAKING PROCESS

- ▶ IDEO
- ▶ Stanford d. School
- ▶ Nueva School

## DESIGN THINKING PROCESS





**FOR WHOM DO THEY  
MAKE?**

**DESIGN THINKING**  
**NEEDS USERS**

**A FRUITFUL PROBLEM**

**WE WERE ABOUT TO  
LEARN SOMETHING**

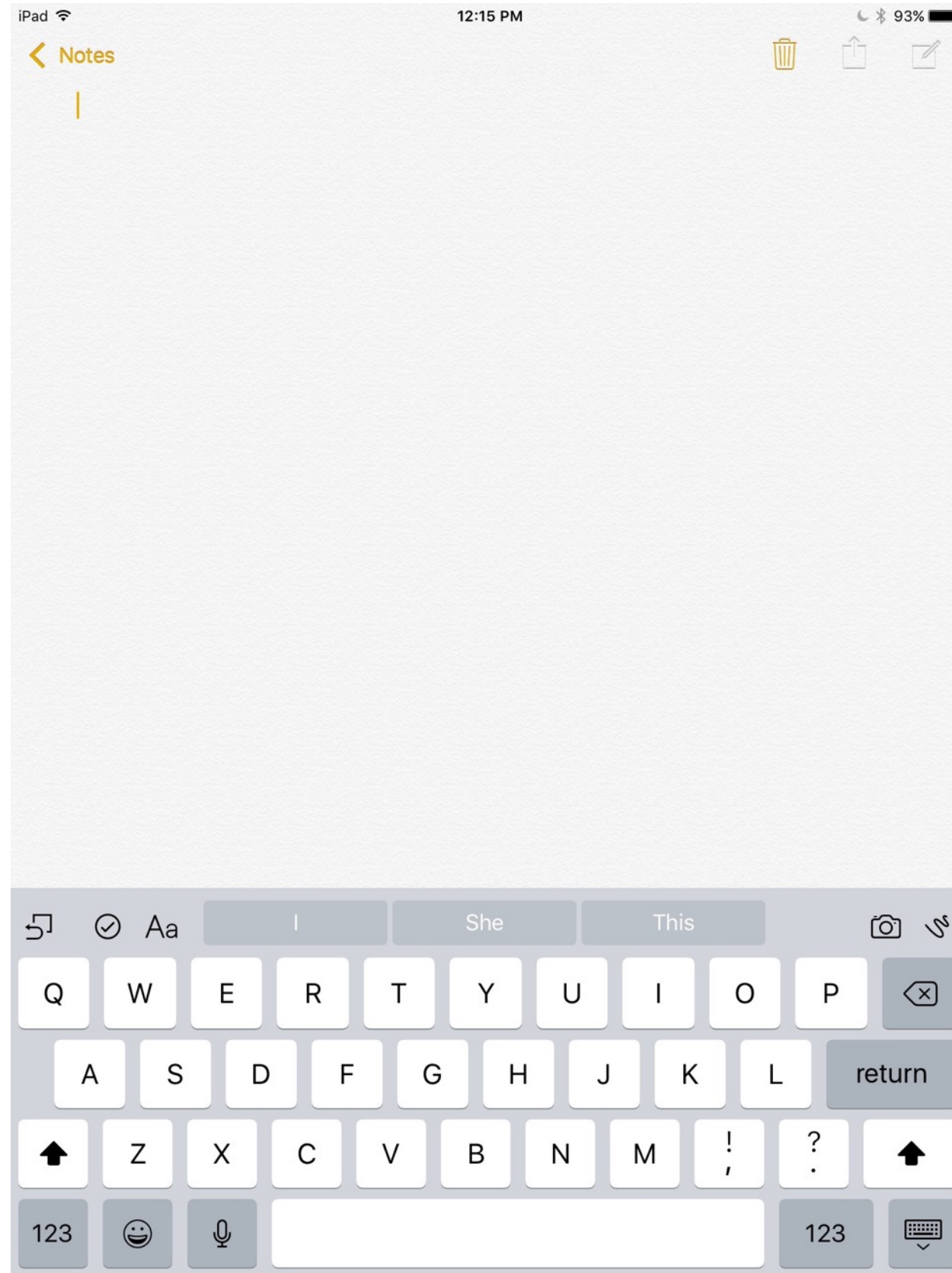


**WHY PUPPETS?**

**PUPPETS ARE MAGIC**

# Use the Notes app to take notes on your users

Research  
&  
Empathize



Useful apps: FaceTime Skype, Pages, Keynote, Safari, Notes, Camera, Google Docs, Popplet



Use the Notes app to take notes on your users





Research  
&  
Empathize

Gerard - swoopy and stylish, hair not blowing, likes loud music, Adele

Tina - look good for carpool karaoke, good lighting

Proud Commuter - get him there, cupholder, armrest, good connection

Rudolph - racing, fast, crushable

Identify  
Needs

Needs Statement:

\_\_\_\_\_ needs \_\_\_\_\_ so as to \_\_\_\_\_.

examples:

Tina needs good lighting so as to shoot quality video for carpool karaoke.

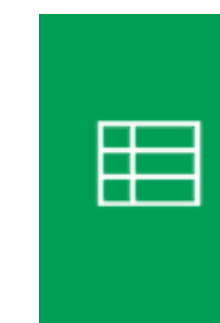
The Proud commuter needs a way to hold his coffee so as to have safe access to caffeine on the way to work.

In your Notes document, create needs statements for your users



## Needs Statement

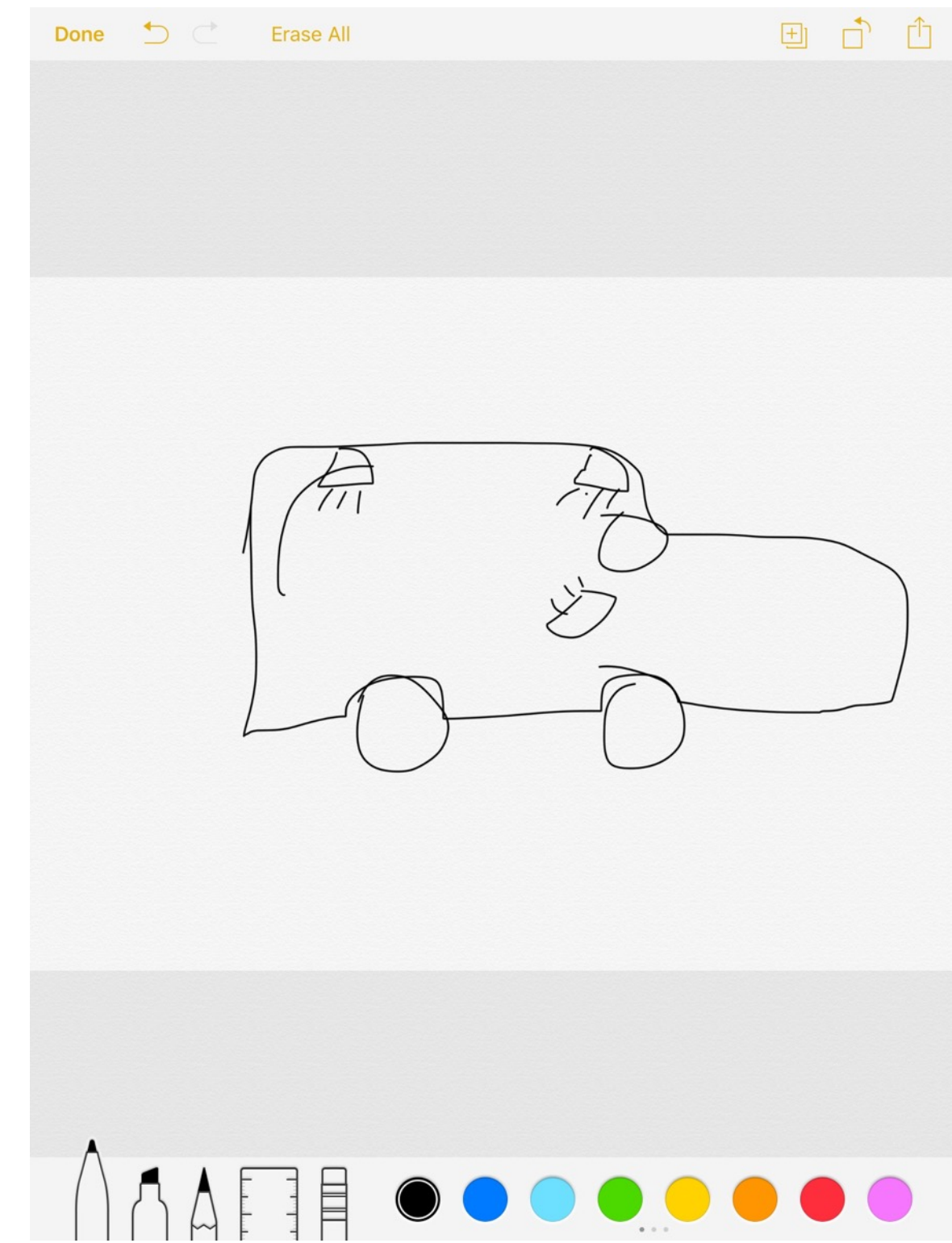
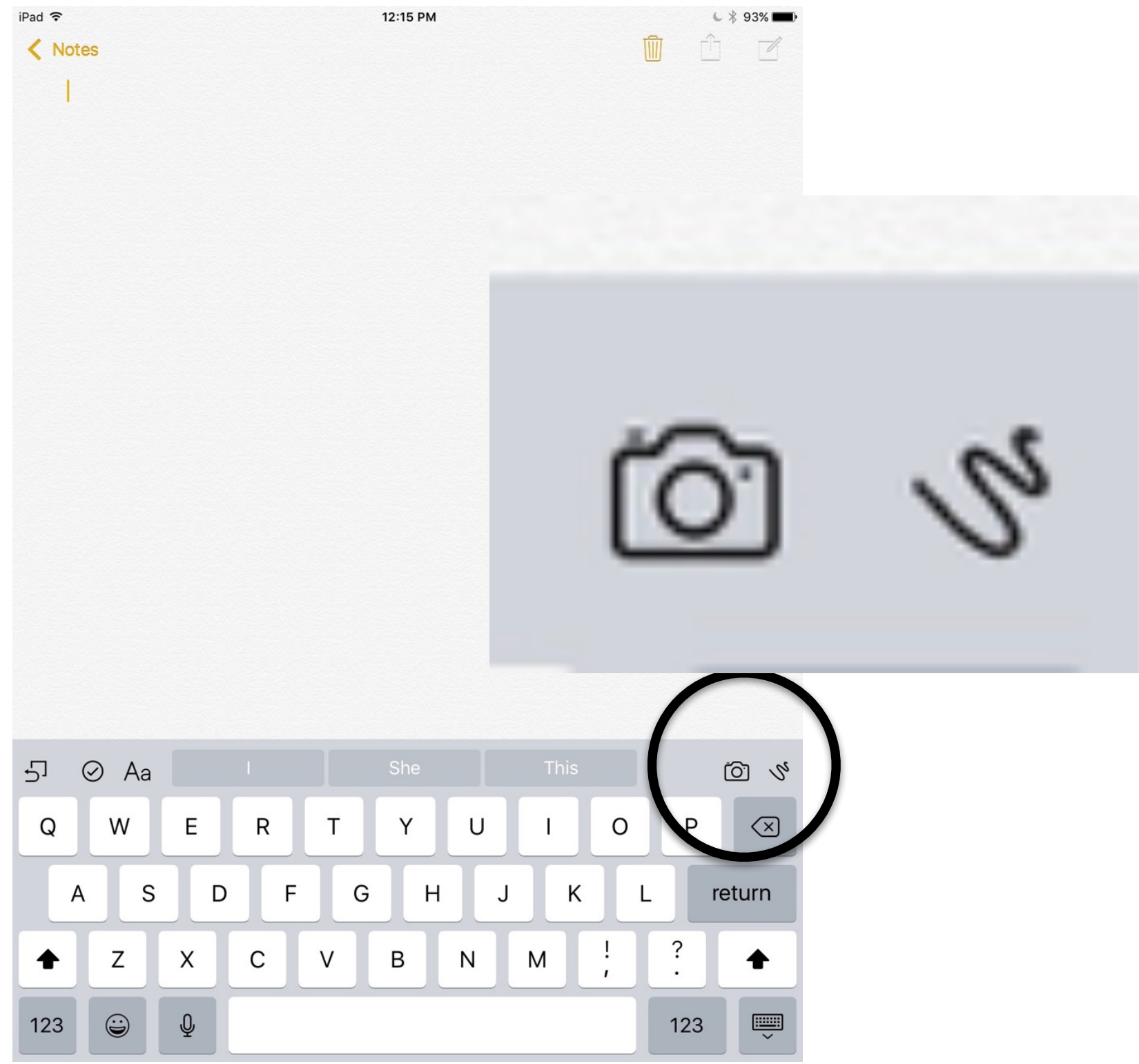
The \_\_\_\_\_ needs \_\_\_\_\_  
so as to \_\_\_\_\_



Useful apps: Numbers, Pages, Keynote, Notes, Google Sheets, Popplet

Generate Ideas

# Use the Notes app to Sketch your ideas



Useful apps: Notes, Camera, Google Draw, Draw & Tell

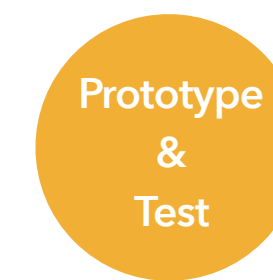
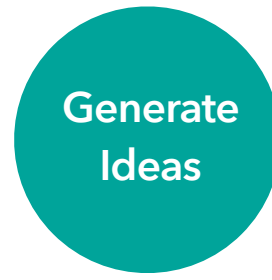
# Rapid Lo-Res Prototyping: Design a car for your user using pipe cleaners!

Useful apps for prototyping:



Camera, Notes, Swift, Draw & Tell, Scratch, Scratch Jr.





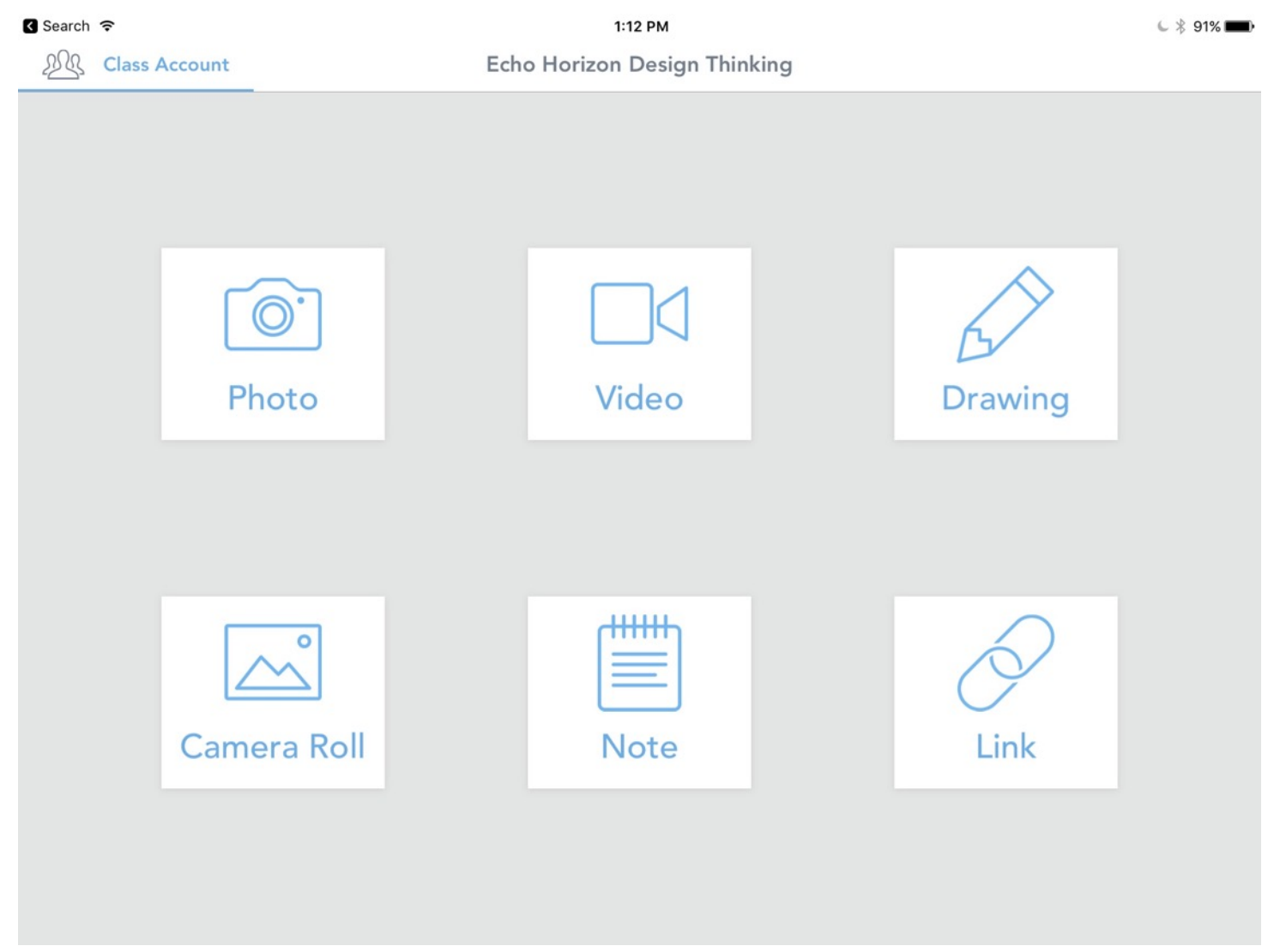
**Cars we made**  
**Grade PreK-Adult**  
**DTWP Car Design**  
**Challenge**



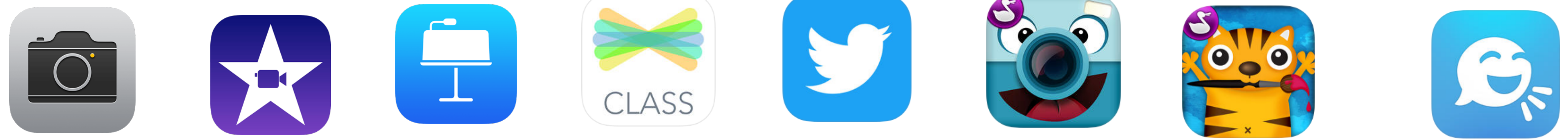
Reflect  
&  
Share

Use the Camera app and/or iMovie to introduce your car.  
Describe its features and how they meet the needs of your user.

Open Seesaw app, scan QR code and post



Post to Twitter with #cue17 #EchoPuppet



Useful apps: Camera, iMovie, Keynote, Seesaw, Twitter, ChatterPix, Draw & Tell, Telagami



Identify  
Needs

Generate  
Ideas

Prototype  
&  
Test

i2

# Sixth Grade Car Build Challenge



# Introducing...



The Tina-nator

i2



# Q&A

Session Resources at [echohorizon.org/puppetvideos](https://echohorizon.org/puppetvideos)

Join us in our Maker Space this summer: [echohorizon.org/PD](https://echohorizon.org/PD)

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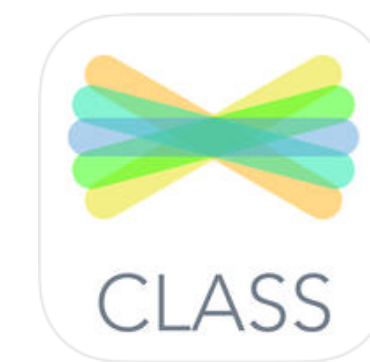
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