

AlphaCopter

alpha

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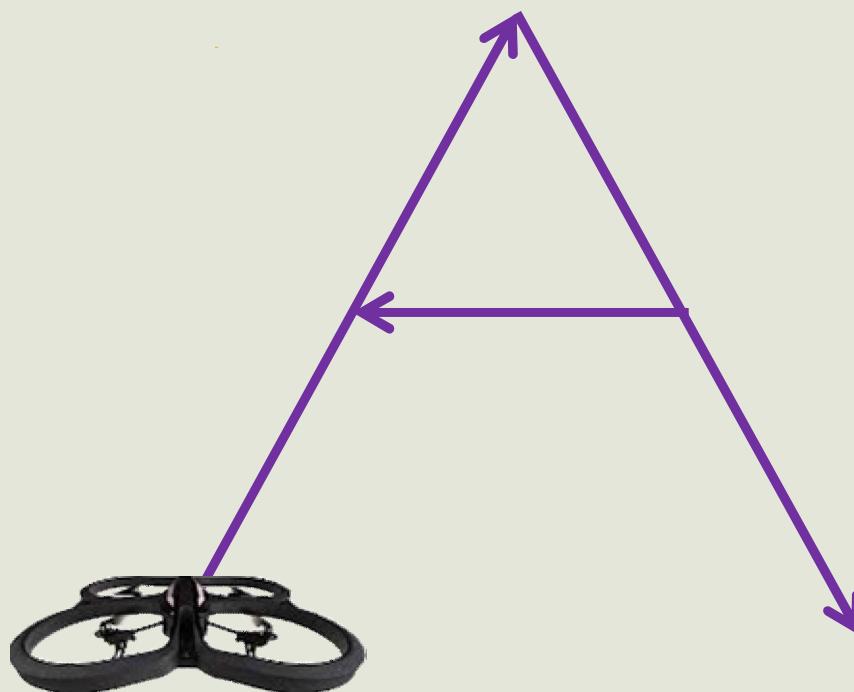
AlphaCopter - The Concept

- Enter an alphabet on the screen.
- Drone will animate the entered letter.
- That letter will also be drawn on the screen side by side, with the help Laptop webcam.
- Laptop webcam will capture the flying Drone.
- After completing the animation, that letter will be visible on screen, with the help of images captured by the webcam.

AlphaCopter - The Application

- AlphaCopter application will make the Drone to animate alphabets.
- And also capture & process those images to make that alphabet visible on the screen side by side.
- Currently, only 3 letter's animation is developed i.e. **A, I, T**
- Apart from this, application can control Drone's movements:
 - Up
 - Down
 - Left
 - Right
 - Front
 - Back
- Application can also send the following commands to Drone:
 - Take Off
 - Land
 - Stop
 - Disable Emergency

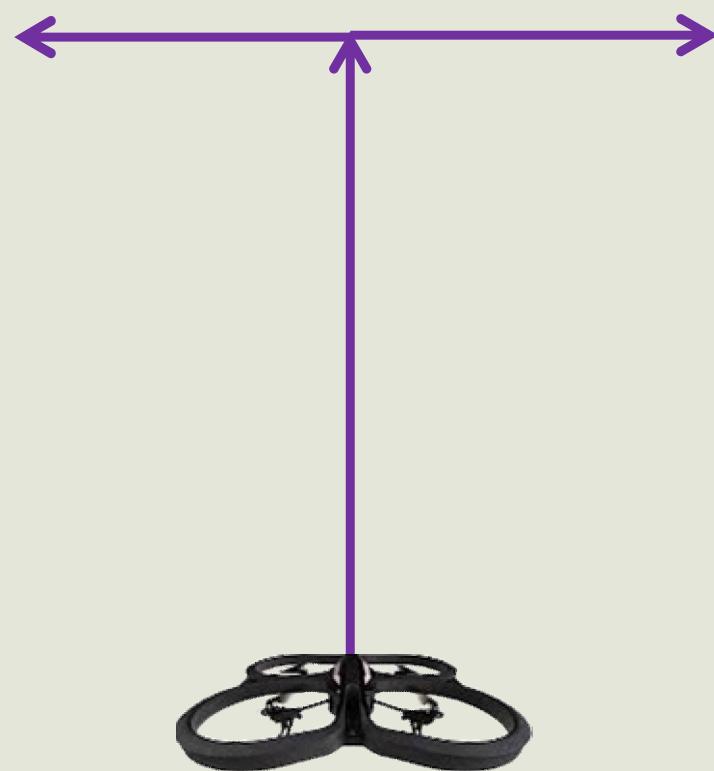
Alphabet A - Animation



Demo – Alphabet A



Alphabet T - Animation



Demo – Alphabet T



Technology/Language Used

- Node JS
- HTML 5
- JavaScript
- CSS
- Image Processing

Code Structure

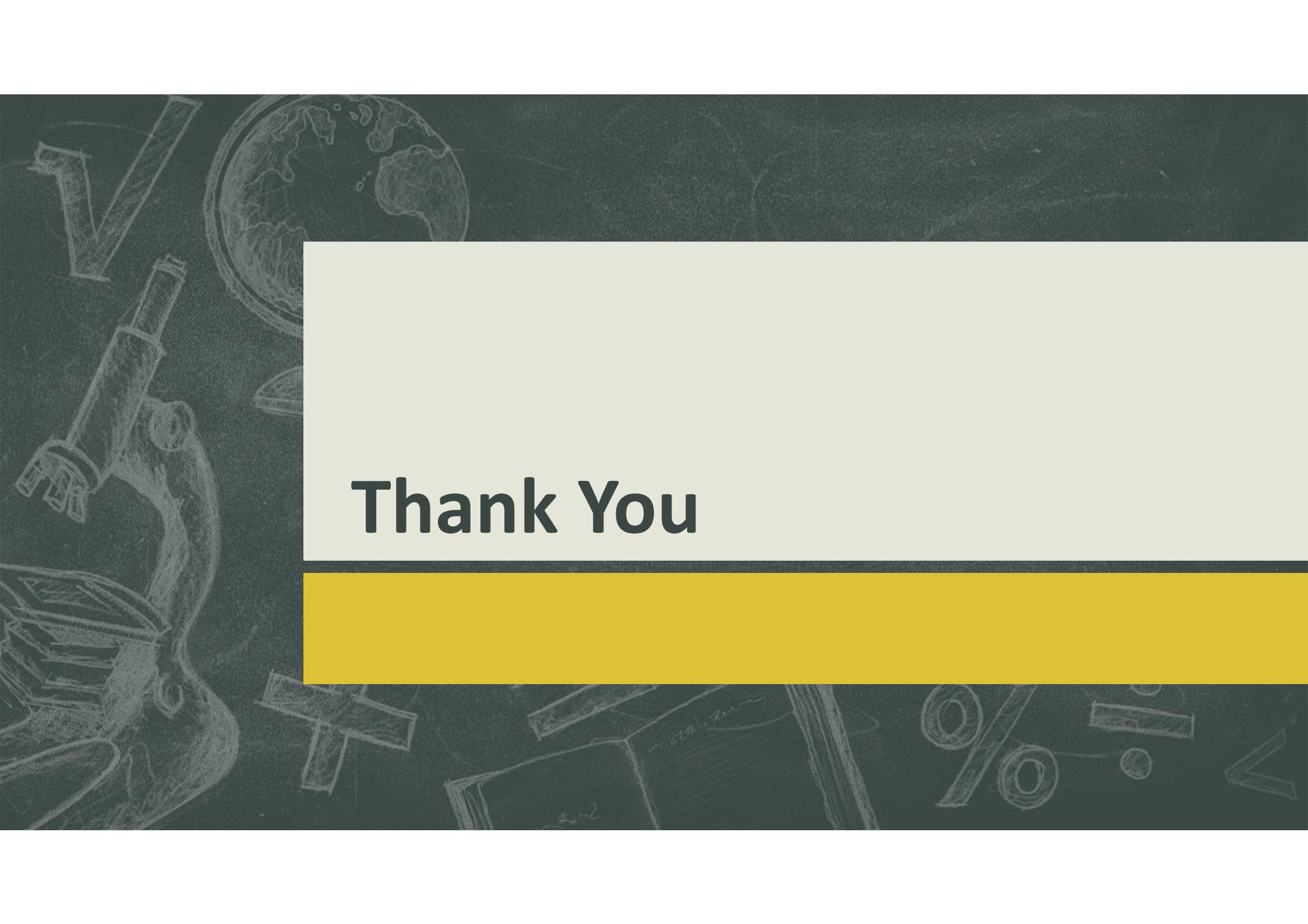
- Node JS
 - AlphaCopter.js (Entry Point)
 - AlphaA.js
 - AlphaL.js
 - AlphaT.js
 - Package.json
- HTML 5
 - Index.html
- JavaScript
 - ImageProcessing.js
- CSS
 - Style.css
- Images
 - ACLogo.png (AlphaCopter Logo)

Dependencies

- Node JS
 - AR-Drone
 - Express

Required Setup Time & Why?

- 5-7 minutes setup time is required before the show.
- Laptop & Drone setup, in a way that laptop's webcam can capture Drone while flying.
- Projector & laptop connection.



Thank You