Alpha Presentation
Volkswagen Shopping App with Augmented Reality

The Capstone Experience

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Project Overview

• AR app to streamline the car buying process
  ▪ Help users envision how the car will look at home
  ▪ Customization options – tailored to liking

• User experience, intuitive placement of vehicle model
  ▪ Camera direction, gesture controls
  ▪ Accurate scale

• Realistic models that fit in environment
  ▪ Photo/video capture
  ▪ Share with friends and family
System Architecture

**SDKs**
- ARKit
- RealityKit
- SceneKit

**IDE/Languages**
- Xcode
- Swift

**AWS**
- RDS
  - MySQL
- API
  - AWS Lambda

**Admin**
- S3 Bucket

**User**
- iOS
- Panel
Interior
Placement Preview
Customization
Car Displayed
What’s left to do?

• Selection view with collection of models
• Preview with selected model
• Implement accessories
• Store user customizations in database
• Video capture and share view implementations
• Admin panel web application
• Reduce model and AR load times
• Display multiple cars
Questions?