TELEHANCE
Improving Telehealth Consultations in Real-Time
In Partnership with Teladoc Health
OVERVIEW

01
PROBLEM VS. SOLUTION
Existing Problems with Online Medical Consultations

02
IMPLEMENTATION
Tech-Stack/Frameworks Used

03
DEMO
See How It Works!

04
CHALLENGES/WHAT’S NEXT?
Scheduled Plans/Improvements Going Forward
## Problem

### #1: Consult Quality:
- Problematic Consults
  - Aggressive conversations: insults, personal attacks, sexual harassment.
  - Patient Drug seeking behavior
  - Doctor Malpractice issues
- Current Solution: Manual Review
  - Very hard to scale
  - Human error

### #2: Consult Efficiency:
- Doctors
  - Difficult to scribe while asking questions
  - Loss of relevant medical information due to limited consultation time
- Patients
  - Receive insufficient clinical care
- Flag conversations
  - Numerical scoring system used to assess consult quality
  - Highlight consults for internal review
- Streamline communication
  - Allow for consultations to be initiated between doctors and patients
  - Obtain transcript of the conversation
- Develop consultation management system
  - Provide doctors additional means of documenting consultation
  - Provide admin additional means for oversight and transparency
Technical Challenges

- Initial issues with speech-to-text AWS Transcribe model
- Sparse Documentation regarding use of lambda functions in certain contexts
- Working with certain tools/frameworks for the first time
- Limitations when working with DynamoDB
WHAT'S NEXT?

ADDITIONAL FEATURES
Automated Scribe via Amazon Medical Comprehend

MODEL ACCURACY
Improve accuracy of speech-to-text and toxicity flags

UI/UX
Improve User Experience
Any Questions?