

ID 4510 WEARABLE PRODUCT DESIGN
PROJECT PROPOSAL

VR 3D Dance Art Piece

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Kimberly Wang / Marissa Childers

1 Project Idea

The new way of experiencing dance as a visual art piece

A visual light show in 3D/ Virtual Reality build off of performances wearing the product

TECH

Arduino Technology
to capture
the essence of
a dancer's
form and movement

WEARABLE

Concept 1.
Arm Band

Concept 2.
Shoe Accessory

PERFORMANCE

Ballet
Tap
Tutting
Hip-hop
or Contemporary

VISUALIZATION

Transforming
the speed,
movement,
and force
of the motions
into light

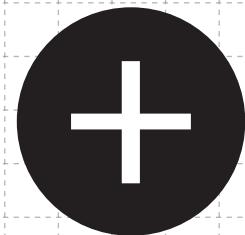
2

Inspiration



3 Group Interactions

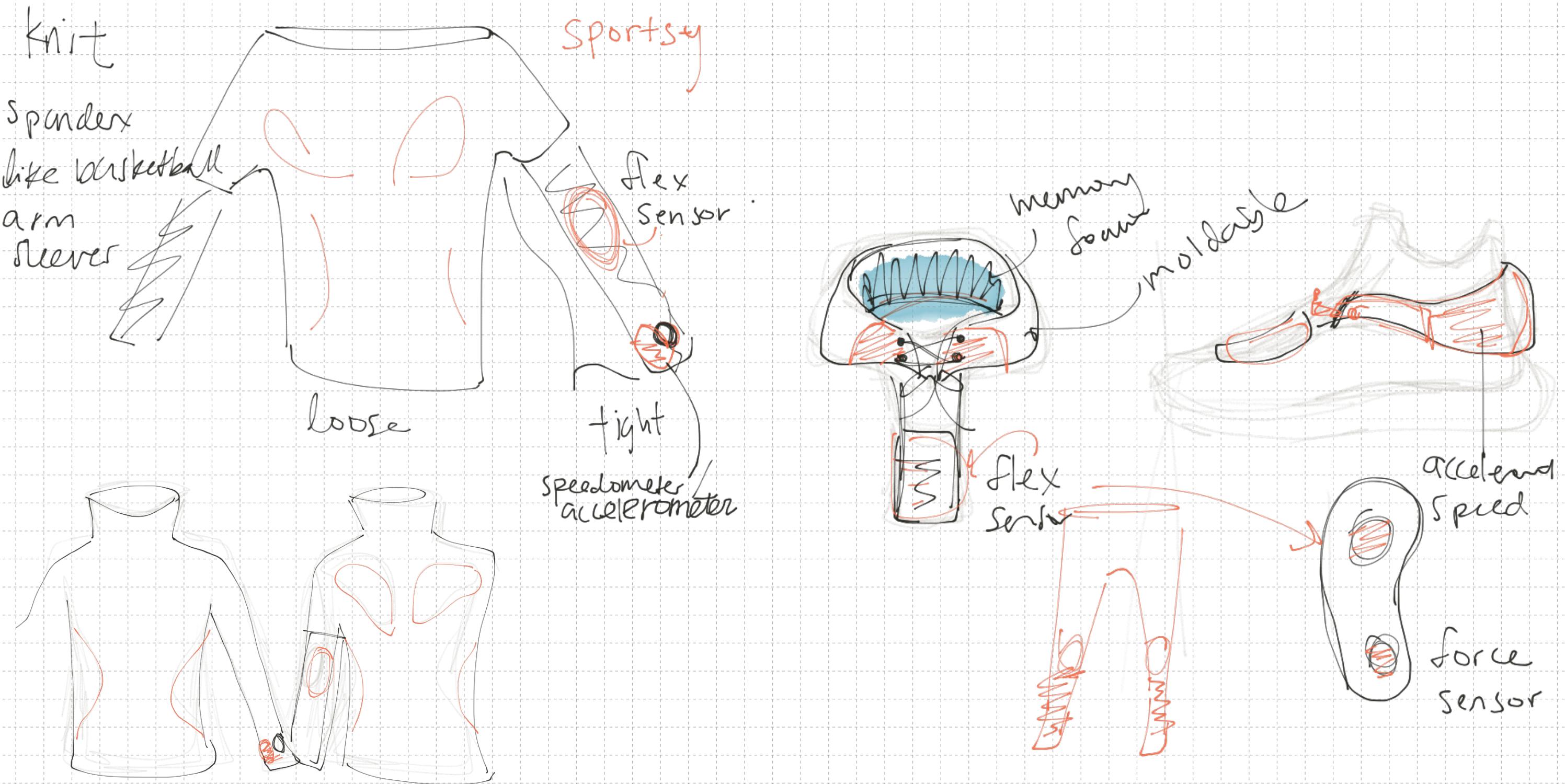
Interactivity
&
Computer Science



Knowledge
of the
Design Process

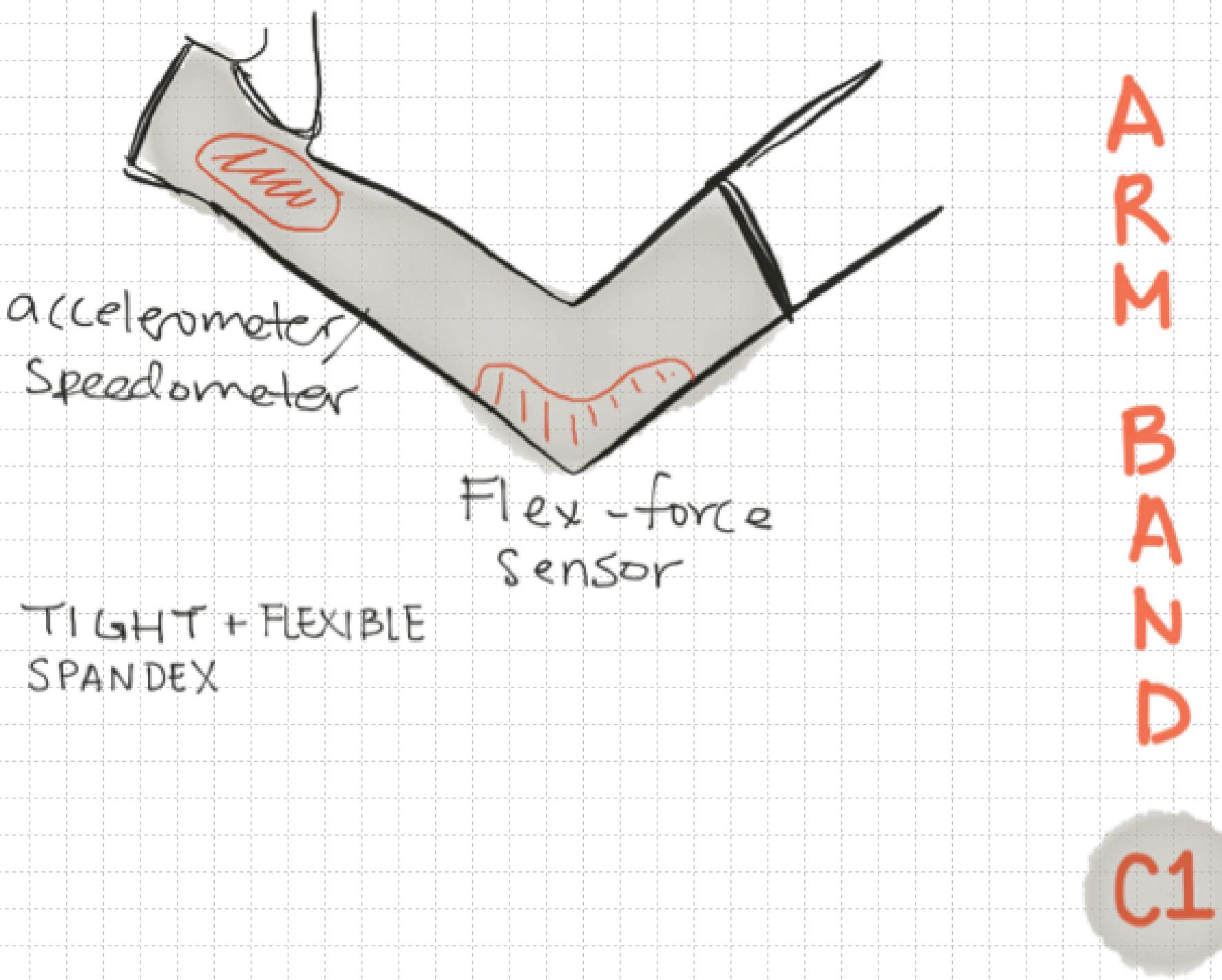
Photoshop/Illustrator: Everyone
Sewing: Everyone
3D modeling: Kimberly / Marissa
Arduino: Lanssie / Sera

4 Initial Design



5

Concept: Armband

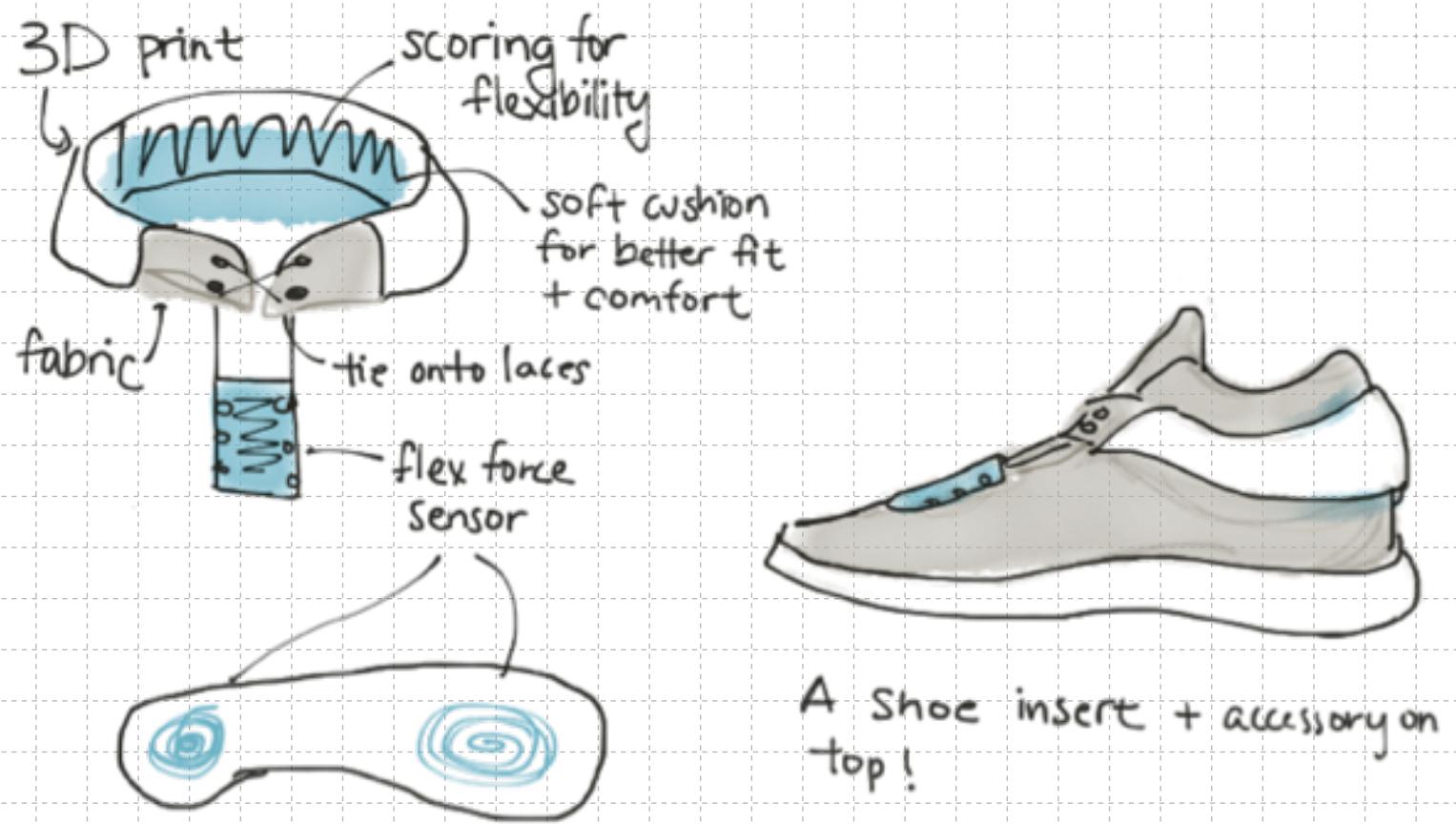


Fabric Choices

Nylon
Polypropylene
Spandex
Bamboo pulp
Polyester

5

Concept: Shoe Accessory



A shoe insert + accessory on top!

C2

Fabric Choices

Gore-Tex

Nylon

Vinyl acetate

Polyurethane

PVC

- 3D
- Stores accelerometer
 - Speedometer
 - can fit other arduino pieces

6 Schedule

Week 07 <10/10, 12>

Revise the Design Proposal according to feedback
Complete Design Proposal

Week 11 <11/7, 9>

Prototyping

Week 08 <10/17, 19>

Paper prototyping
Basic sensor interaction

Week 12 <11/14, 16>

Construction and testing
Wearable prototype integration into dance

Week 09 <10/24, 26>

Wearable physical prototyping
Achieve wearable tracking and communication

Week 13 <11/21, 23>

Testing and debugging

Week 10 <10/31, 11/2>

Wearable prototype testing and refinement
Preparation for Design Review

Week 14 <11/28, 30>

Finish Final Presentation and practice

Week 15

DECEMBER 5TH PROJECT PRESENTATION

Thank You