



# AMBIENT EATS

# SCOPE

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Reinvent the Dining at Home experience  
with an Internet of Things product.

# RESEARCH FINDINGS

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- Most people don't feel properly stimulated by eating and look for other distractions.
- Kids don't sit through the entire meal at the dinner table as they have no incentive to.
- Families don't eat as many meals together as they used to.

**Main Finding:** Families rush through and don't properly engage during dinner time.

# IDEATION

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## **Connected High Chair**

A baby's high chair which provides auditory, tactile, and visual feedback throughout meal time to encourage positive eating habits.

## **Cuisine Themed Atmosphere**

A constructed environment which transports a user to the location where the meal originates through visual and auditory cues to simulate eating in the actual location.

## **Musical Plates**

A set of interactive dinnerware which enables users to construct music through their motions during the dining experience.

# VISION

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To aid families in better engaging their children at dinner time through a connected dining experience.

# REDEFINITION

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After further exploration, the team chose to move from a constructed music environment to an ambient rainforest.

The environment was simulated by having team members eat a meal together and overlaying audio features to the video to understand the experience the concept would provide.



# PROTOTYPES

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## **Fork**

Plays noises to reflect movements by each eater. Each noise mapped to each individual user.



## **Cup**

Thunder plays when each eater drinks from their cup.



## **Plate**

Plays lightning light effect on plate every time thunder clap plays. Once all eaters have completed their meals, plates sparkle blue and green to signify the end of the meal.

# THE FORK

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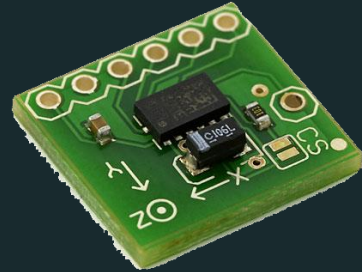
Every time a bite is taken, the specific sound assigned to each person is played. If only player is present, the noises all noises are utilized and randomized.

**Sensor:** Accelerometer

**Output:** Audio

**Rainforest Noises:**

- Crickets
- Koyla Bird
- Parrot





# THE CUP

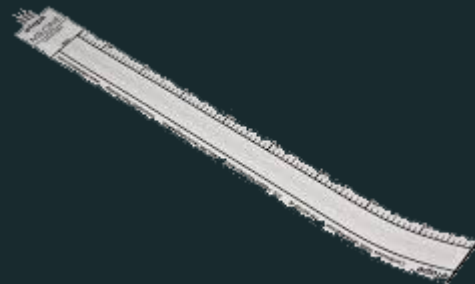
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When the level of liquid in the cup changes, the same sound is played for every eater.

**Sensor:** Water Level

**Output:** Audio & Visual

**Noise & Effect:** Thunder & Lightning



# THE PLATE

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The plate has a neopixel and LED strip light which are activated throughout the meal. When users drink, the plate lights up with lightning effects to compliment the thunder noise. When the meal is over – when all forks have been immobile for more than a minute – an end meal light plays.

**Components:** Neopixel & LED Strip

**Effect:** Lightning & End Meal Visual



# ADDING SPACE

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## Fork

Varying Space Weapon Noises

## Cup

Spaceship

## Plate

Spaceship Light & End Meal Effect

# FINAL ENVIRONMENTS

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## RAINFOREST

### Fork

Crickets, Koyla Bird, Parrot

### Cup

Thunder & Lightning

### Plate

Lightning & End Meal Effect

## SPACE

### Fork

Varying Space Weapon Noises

### Cup

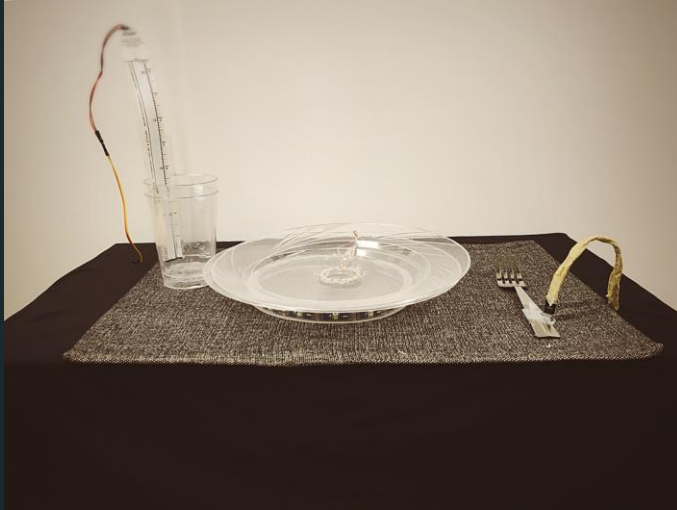
Spaceship

### Plate

Spaceship Light & End Meal Effect

# FINAL PROTOTYPE

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**THANK YOU!**