# **Group Name**: ***Group 1***

## Group Members:

## [Tej Chudali](https://github.com/tejprasadc1/csd-310/tree/main/OutlandAdventureProject)

## Clay Lankford

## [Alexis Simmons](https://github.com/lexis00/csd-310.git)

## [Phillip Thoendel](https://github.com/phillip-bellevueU/csd-310.git)

## [Alexis Yang](https://github.com/ssheshes/csd-310)

## **Selected Case Study:** "Outland Adventures"

Report #1: “**Do enough customers buy equipment to keep equipment sales?”**

We will utilize the equipmentStatus attribute of the Customer entity in the database to assess whether each customer has purchased or rented equipment. In solution II, our Python script transforms the SQL table directly and employs the Python.count() method to precisely calculate the count of customers who have purchased equipment in comparison to the total number of customers, resulting in a percentage. If less than half of the customer base has purchased equipment, we can assume that there aren't enough customers buying equipment to sustain equipment sales. Conversely, if more than half of the customers buy equipment, it indicates there are sufficient customers to sustain equipment sales.

Report #2: “**Do any of the locations show a downward trend in bookings?”**

By combining the destination attribute within the Customer entity with the destination ID from the destination entity, we identify which destination each customer has booked by name. Our Python script directly manipulates the resulting SQL table. Using this approach, we calculate the count of customers who have booked each destination and estimate the results as a percentage of the total number of customers. This allows us to identify locations showing a downward trend in bookings based on these percentages.

Report #3: **“Are there inventory items that are over five years old?”**

We leverage the acquisitionDate attribute of the Equipment entity to determine when Outland Adventures acquired each piece of equipment. Our Python script directly transforms the resulting SQL table. Using Python, we filter through the equipment to display all items acquired over five years ago.





