# Week 5 Contribution - Tanmay Munigala – 12742995

## Graph Database Schema Design

In the context of our team’s project, our graph database design needs to account for some key requirements as well as entities:

### Entities:

1. **Traveller** – Any user on the application
2. **Friend** – A type of traveller. A traveller can have another user who is a friend.
3. **Activity** – Activities which a traveller wants to perform at their destination, such as paragliding, surfing, etc.
4. **Destination** – Location(s) for the trip which the traveller wants to travel to
5. **Offer** – Any running special discounts or offers for a destination/activity.
6. **Mode of transport** – The means to travel from one destination to another.
7. **Trip** – Recommendation generated for the traveller, consisting of destinations, mode of transport.
8. **Topic –** Topics of interest to travellers, such as – adventure sports, bushwalking, sightseeing, etc. Topics comprise of activities.

### Requirements:

1. A user can put in their preference in terms of **return-trips, number of travellers**, **price, activity type, locations, topic, etc.** for a trip, and a suitable travel recommendation is generated for them.
2. Generated recommendations are sorted based on the type of price level the user has requested.
3. If there are any running offers/discounts for any given trip, they are displayed to the user.
4. If the user’s friends have taken any trips recently, these trips are placed at the top of the generated recommendation list.
5. Generated trips will also be relevant to the activities/topics the traveller is interested in.

## Naïve Graph Database Design for Neo4j

Diagram

Description automatically generated