**Project Goals**

Our main goal is to create something that can traverse snow covered paths.

- The vehicle should be reasonably easy to pedal, similar to an average mountain bike.
- Users should be able to operate it safely.
- Tolerances should be similar to that of an average mountain bike.
- The bike should be able to be used on both pavement and snow which can be accomplished using an easy conversion between tires and skis.
- The bike should be corrosion resistant to salt and extreme weather.

![Figure 1: Potential Design Option](image)

- The seat should be functional yet comfortable, taking into consideration winter pants style.
- Reduce the weight of the bike as much as possible to keep it light.
- Potential additions could be warmers in the grips and seat for comfort.
- Our cost target is to stay within the $300 senior design budget limit.
- Time constraint is to be done before the snow melts in order for maximum testability.