Purposes:

- 1. Allow employers to assign work hours for employees.
- 2. Inform employees of when they (and others) are working.
- 3. Allow employees to exchange working hours amongst each other.
- 4. (Potentially) Encourage employees to be present for scheduled hours.
- 5. (Potentially) Enable employees to declare when they are willing to work.
- 6. (Potentially) Enable multiple employers to collaborate on the same schedule.

Concepts:

- 1. Shift (open shifts)
- 2. Position ("job" or "role")
- 3. Schedule ("week")
- 4. Offer (relationship with claim: Trade)
- 5. Claim
- 6. Employee
- 7. Employer
- 8. Availability
- 9. Reminder

Design Challenge:

- Employer as a subset of employee -- differentiation; is it just a permission; are employers employees?
- Employer power vs. Employee schedule security -- can my shifts change at the last minute
- Not enough people for a given shift -- or a person tries to trade a shift but isn't successful
- How many companies can an employee work for -- only one; implementation would be too difficult and deciding what schedule to show
- Delete future shifts. Delete linked (by parent) shifts rather than just deleting shifts that occur at that time. This is like the iCal behavior.
- How to represent time separate from date object? number? schema?

Risks

- 1. black market trading
 - a. system is inaccurate
 - b. employer reassignment
 - c. simplify process A LOT <better UI>
- 2. high initial time commitment barrier to getting started
 - a. employer creation, employee initiation should be VERY easy
 - b. possibly have a lot

Optional Extra Features

- 1. Google Calendar Export
- 2. Mark whenever a person doesn't show up
- 3. Remind employees of their shifts via automated emails

Minute Crucial Details:

If you have some idea related to this in the middle of the night -- write it down!

- 1. Time stamps on everything!
- 2. Ensure traded shifts have not already passed.
- 3. Stop people from claiming more than 40 hours (or whatever limit you decide)
- 4. Assignment vs. free-for-all claim
- 5. Writing locks the collecting. Can partially-written data be read.
- 6. Easy to make a lot of recurring or one-time events (this is a preference or different use case).