1. List two to four Desired Needs of your project that led to your final design objectives.

- Personalized treatment plans for diabetic patients using more nuanced analysis given by CGM data
- Menstrual rhythms, specific to women, have an impact on glucose regulation which should not be misinterpreted in analysis

2. List the major Constraints on your design/project

a) **Safety/Regulatory Affairs**: concerns could include data leakage or incorrect results
b) **Risks**: The concerns of data leakage and incorrect results can also be considered a risk
c) **Global Impact**: CGM monitoring is only available to limited socioeconomic groups
d) **Manufacturability**: Our analysis pipeline may be restricted to Dexcom devices
e) **Quality Control/Marketability**: Our dataset lacks labels so more rigorous testing needed

3. List the major Engineering Standards on your design/project

a) affected the components used in the device: HIPAA Privacy Rule de-identification standard
b) standards that constrain the device and its performance(ISO); ISO 14155 (ISO) provides good clinical practice requirements for device

4. Explain Ethical, Environmental, or Societal concerns for practical applications of your project.

- **Environmental**: waste from replacing device
- **Societal**: Need to consult doctors, can't rely solely on algorithm
- **Ethical**: No true labels, maybe unintentionally leave out certain groups

5. Describe Active Teamwork and Leadership in your design group

a) collaboration and inclusion of diverse opinions? Everyone express opinion and discuss
b) delegation of leadership on subprojects? Whoever comes up with an idea is responsible for leading the subproject
c) establishing and reaching goals and deadlines?:During the meetings we discuss our goals and task division as well as internal deadlines.
d) received or given constructive feedback?: For assignments, as we work on it we leave comments in the document or presentation.

6. What were the most significant motivating factors that led you to

a) acquire new knowledge: New dataset (time series) and women's health interest
b) be self-initiating: encouragement of our mentor to be curious
c) persist against challenges and setbacks: many of our ideas were insignificant, so we further analyzed other features.

7. What are your most innovative and/or entrepreneurial ideas for this project?

- I thought that there could be differences in cyclicity within the day because during different phases of the cycle, eating patterns change which could manifest as irregular glucose patterns.