Communication System Exploration

This project is a semester-long, team experience. Each team selects one communication system that they would like to know much more about. For that system, they will:

❖ Analyze the system to determine how it operates
- ✓ From signal generation, modulation, propagation, reception, demodulation and interpretation
- ✓ Identify the current stakeholders and their needs and motivations

❖ Research why the system was created and when it was first put into operation
- ✓ Were the stakeholders and their motivations the same as modern day?

❖ Predict what changes/improvements are coming up in the next 10 years
- ✓ Justify these predictions (evidence, sources, etc.)

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❖ Skillset Objectives
  ○ Demonstrate the ability to work effectively in groups to analyze electronic communication circuits.

  ○ For various modulation techniques, be able to analyze and evaluate electronic communication systems from generation to propagation to reception.

❖ Mindset Objectives
  ○ Observes trends about the changing world with a future-focused orientation/perspective. (curiosity)

  ○ Identify and evaluate sources of information. (connections)

  ○ Identify the needs and motivations of various stakeholders. (value)

  ○ Be able to teach and learn from peers. (collaboration)

  ○ Produce effective verbal presentations. (communication)

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❖ Deliverables and Assessment
  ○ Initial proposal (formative assessment and guidance)
  ○ Presentation outline (formative assessment)
  ○ 1st draft presentation (formative, dry run for instructor)
  ○ Final presentation/demo (summative, peer reviewed)
  ○ Reflection
    ■ Teamwork functioning (formative/summative)
    ■ myCourses reflection (formative)
❖ Deployment
  ○ Primarily out of class with some class time devoted at the beginning to set-up the project, in the middle to check-in with the entire class and at the end for presentations