

## Drones

1. Stakeholder: consumers
  - privacy issues
    - Amazon has a past of this
    - No legal repercussions
  - Freelance photographers
    - Monetary gain
    - Spectacular views
    - Close up of views of high places (hard to reach)
  - good Samaritans
    - Saving people, get out of woods, or if lost
  - hobby groups and flying clubs
    - Easy to operate
  - All groups must adhere to drone regulations
2. Stakeholder: law enforcement
  - Enforce laws
3. Stakeholder: FAA
  - Regulate safety and protect commercial aircraft and drones
  - 400 ft altitude limit
4. Stakeholder: Military
  - They have to be aware of drones
  - Cheaper and low point of entry
  - Never had to deal with this because 20 years ago it was planes
5. Disadvantages:
  - Software issues
    - Malfunctions high up, can be dangerous
    - Had this happen to me personally, needed to find places where it was safe to fly
  - People do not follow the rules
    - Endangering aircraft
    - Invasion of privacy
      - \* Celebrity and paparazzi
  - Possibility of drones being hacked
6. Ethical Concerns
  - Two biggest concerns: safety and privacy
  - They seem harmless, but can be dangerous when used improperly
    - We already have regulations designed to mitigate risk of harm
    - It is up to the user to follow them
  - Regulation on drone privacy is still lacking
    - It exists, but not exactly how you'd imagine
  - Personal drones can offer an endless stream of your data
7. Code of ethics
  - ACM 1.1: Contribute to society and to human wellbeing, acknowledging that all people are stakeholders in computing
  - 1.6 respect privacy
    - Personal drones can collect more info about you than any other data collection tool that's branded as a product for you to use
    - It's a new medium to collect info, it isn't fleshed out yet
  - 1.7 Honor Confidentiality
    - The EU GDPR gave many rights to individuals trying to assess a company's stores of personal data of them
    - In august 2018, a man exercised these rights and requested a ZIP file from Amazon containing

- the data they kept on him, and received someone else's data
- 2.6 Perform work only in areas of competence
- 2.7 Design and implement systems that are robustly and usably secure
  - KNowing when not to take on a task is a major ethical responsibility of dev and all IT professionals
  - Allowing a vulnerability to deploy due to negligence can have repercussions that trickle into every little profession

#### 8. Solutions

- AI Tool that can find drone pilots flying too close to aircrafts or protected airspace
- Addition of security software which makes it more difficult for drones to get hacked
- Increase in infrastructure for monitoring drones