Everyday Ethics in Design

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Announcements

- Last lecture in this room (PHYS 114)
- No lecture next week for anyone
- Preparing for design review:
  - Other lecture this week “Giving Effective Design Review Presentations”
- Leadership Workshop Series begins 3/2 (need to sign up in myEPICS by 2/16)
- Professional Development Series, Part II
  - Mondays, 4:30 pm in PHYS 223: 4/6, 4/13, 4/27
Goals for Today

1. Understand everyday ethics in design
2. Learn framework for making ethical decisions
3. People-first language

Video viewers: If you haven’t completed the Ethics Survey yet, you should complete it before continuing with this lecture (link on sharepoint page: https://purdue.qualtrics.com/SE/?SID=SV_6XzroxydI7URR41)
ETHICS:
• The theory of how we ought to act
• The cohesive set of principles which guide & evaluate behaviour (moral choices)
• The rules of conduct recognized in certain associations or departments of human life
• Organized in CODES or FRAMEWORKS

MORALITY:
• Behavior conforming to accepted moral standards
Professional Ethics
Professional Ethics

- Body of philosophy that guides a person in their professional capacity

The Attributes of a Profession:

- Involves work that requires specialized knowledge and skills, judgment, and discretion.

- Membership requires extensive formal education, not only field work or an apprenticeship.

- Self Regulating: Members set standards of admission, conduct, and quality — and enforce these standards.

- Significant public good results from practice
Codes of Ethics

- Codes of Ethics are systems of ethics written down
- Individuals can have codes
- (EPICS) teams can have codes
- Professional societies have codes
- Most companies have codes
  - All codes will be slightly different, depending on what will lead to happiness in each context
  - Example: EPICS team codes all differ depending on the students who made them
Professional codes of ethics

- Psychology:
  http://www.apa.org/ethics/code.html
- Education
  http://www.nea.org/home/30442.htm
- Audiology
  http://www.audiology.org/professional/aba/ethics.php
- Engineering
  http://onlineethics.org/
Engineers, in the fulfillment of their professional duties, shall:

- Hold paramount the safety, health, and welfare of the public.
- Perform services only in areas of their competence.
- Issue public statements only in an objective and truthful manner.
- Act for each employer or client as faithful agents or trustees.
- Avoid deceptive acts.
- Conduct themselves honorably, responsibly, ethically, and lawfully so as to enhance the honor, reputation, and usefulness of the profession.

What a Professional code of ethics does not do:

- Cover all possible situations.
- Address issues associated with emerging technology.
- Do not replace the individual's capacity for moral reasoning and creativity.
- Resolve conflicts between competing goods/values.
What are examples of ethical situations you have/might encounter in your project?

- Safety
- Sustainability
- User friendliness
- Animal welfare
- Ergonomics
How safe is safe enough?

From the Code: 
*Hold paramount the safety, health, and welfare of the public.*

Is it possible to make something 100% safe?

How do decide what is “safe enough”?
Moral Decision Making
Moral Decision Making

- Moral Problem Statement
  - Stakeholders and their interests
  - Moral values that are relevant
  - Relevant facts
- Options for action
- Ethical Judgment
- Reflection

Ethical Cycle (I. van de Poel and L. Royakkers, 2007)
Ethical Judgment

Evaluate the options by asking the following questions:

1. The Utilitarian Approach
   - Which option will produce the most good and do the least harm?

2. The Rights Approach
   - Which option best respects the rights of all who have a stake?

3. The Justice Approach
   - Which option treats people as I want to be treated?

4. The Ethic of Care Approach
   - Which option is best for those most in need?

5. The Virtue Approach
   - Which option leads me to demonstrate honesty or other virtues?
Your student design team has designed a new car that allows children with physical and cognitive disabilities to race down a hill by allowing an adult to ride in a backseat and maintain full control of the car. Based on suggestions from the adults, you have added spring tension to the child’s steering wheel in front in order to simulate the feeling of driving and make the child’s experience more realistic and fun. The child will not have the ability to control the car, only the illusion of control. Before the first test run with an adult and a 14-year-old child onboard you hear the child’s parent tell the child to “be careful” and to “drive safely.” The parent turns to you, explains that because of a cognitive disability the child likely won’t understand the difference anyway, and asks you to tell the child that the front steering wheel is actually functional. The request that you lie to the child would take advantage of the child’s disability and it creates the possibility that the child would feel responsible if they were to lose the race or have an accident.

Would you lie to the child? ___ Yes  ___ Can’t decide  ___ No

What are the ethical issues?
<table>
<thead>
<tr>
<th>Moral problem statement</th>
<th>Characteristic of a moral problem: two or more positive moral values or norms that cannot be fully realized at the same time. (van de poel &amp; Royakkers)</th>
</tr>
</thead>
</table>
| Problem analysis        | Stakeholders and their interests  
Relevant moral values  
Relevant facts |
| Options for actions     | Go beyond the two options presented---lie or not  
Can you find a win-win? |
| Ethical judgment        | Moral acceptability of each option is judged using both formal and informal frameworks |
| Reflection              | Do the different frameworks lead to same or different conclusions? Is there a conclusion that might not be covered by a framework in isolation? |
People with Disabilities: People-first language, Beyond PC

Reflects an appreciation for the person, and does not make the disability or other characteristics the central feature.

- People with disabilities
  - vs. Handicapped person or “autistics”
- Someone who uses a wheel chair
  - vs. confined to a wheel chair

Impacts we interact with people, the way we view people, and as designers, the way we design for people.
<table>
<thead>
<tr>
<th>Affirmative Phrases</th>
<th>Negative Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>person with an intellectual, cognitive, developmental disability</td>
<td>retarded; mentally defective</td>
</tr>
<tr>
<td>person who is blind, person who is visually impaired</td>
<td>the blind</td>
</tr>
<tr>
<td>person with a disability</td>
<td>the disabled; handicapped</td>
</tr>
<tr>
<td>person who is deaf</td>
<td>the deaf; deaf and dumb</td>
</tr>
<tr>
<td>person who is hard of hearing</td>
<td>suffers a hearing loss</td>
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<tr>
<td>person who has multiple sclerosis</td>
<td>afflicted by MS</td>
</tr>
<tr>
<td>person with cerebral palsy</td>
<td>CP victim</td>
</tr>
<tr>
<td>person with epilepsy, person with seizure disorder</td>
<td>epileptic</td>
</tr>
<tr>
<td>person who uses a wheelchair</td>
<td>confined or restricted to a wheelchair</td>
</tr>
<tr>
<td>person who has muscular dystrophy</td>
<td>stricken by MD</td>
</tr>
<tr>
<td>person with a physical disability, physically disabled</td>
<td>crippled; lame; deformed</td>
</tr>
<tr>
<td>unable to speak, uses synthetic speech</td>
<td>dumb; mute</td>
</tr>
<tr>
<td>person with psychiatric disability</td>
<td>crazy; nuts</td>
</tr>
<tr>
<td>person who is successful, productive</td>
<td>has overcome his/her disability; is courageous (when it implies the person has</td>
</tr>
<tr>
<td></td>
<td>courage because of having a disability)</td>
</tr>
</tbody>
</table>

You will receive credit for this lecture if you
- Turn in scantron/submit attendance in myEPICS
- AND complete the Ethics survey

Attendance, fill in your name, PUID and true for #1 (in pencil!)
Hand individually to TA/me