Team 5

Sustainability of Technology

-Cody Dirlam
-Omar AlAli
-Ryan Briglia
-Loloh AlHadlaq
Cody Dirlam

**Class:** Sophomore  
**Major:** Chemical Engineering (Energy Fuels Option)  
**Future:** I hope to one day work in the energy industry helping to create new forms of renewable energy  
**Hobbies:** Literally any sport, people watching  
**Activities:** Morale for THON, Canyon on the weekends  
**Hero:** Muhammad Ali  
**Favorite Movie:** Miracle

“Believe deep down in your heart that you’re destined to do great things.” - Joe Paterno

Harry Potter World at Universal
Hydraulic Fracturing

- Need: Extensive supply of fuel to satisfy society’s ever growing need for automobiles, heat, etc..

- Problem Solving: Discovered the Marcellus Formation containing anywhere from 150-500 trillion ft$^3$ of natural gas, and also created a process to extract it.

- Solution: Hydraulic Fracturing

  - Applies to everyone

Creation of fractures in the bedrock with the use of high pressure fluids. These fractures allow natural gas to seep out and be collected.
Omar AlAli

- **Class:** Freshman
- **Major:** Mechanical Engineering
- **Future:** Being from Kuwait I hope to work in one of the oil companies where I would help develop new, more efficient machinery.
- **Main Goal in life:** To be happy and successful.
- **Family:** Both my parents obtained their PhD and now teach in Kuwait. I have 2 brothers and 1 sister. My eldest brother is also getting his PhD in Nano Medicine this year.
- **Hobbies/Activities:** Most indoor team sports, Soccer, Video Games, watching soccer (Arsenal).

“I'd rather be hated for who I am, than loved for who I am not.” - Kurt Cobain

Times Square, New York
Augmented Reality

- It's a way to use technology to redefine space, and it places a virtual layer over the world.

- Consider visiting a museum in the future. An AR browser will "attach" information to the art so you don't need to buy one of those audio tours.

- Imagine browsing a huge catalogue of clothes whilst shopping or head to a virtual pop-up store.

- Everything will be in your possession, why travel when you can just have that scene in your living room?
Ryan M. Briglia

- **Personal**
  - Be happy with the life/job I have. Practicing Catholic.

- **Social Life**
  - Maintain relationships with my close friends and remain close with my family.
  - Plan on being married with a family.

- **Material Life**
  - I want to be comfortable with my finances, but I’m not going to make money my top priority.

- **Work**
  - Hopefully will be working as a mechanical engineer after college.
  - Eventually would like to open up my own business.
  - Considering joining the Army after college.

- **Recreation**
  - I plan on joining a men’s softball league or something to stay active, also I will be playing a lot of golf when I retire.

- **Politics**
  - Considering going into national politics after my career.
Society is Improving

- Society is solving more problems than we generate.

- Medicine: Global life expectancies are at all time highs (now 78.2 years in USA)

- Energy: Working to replace fossil fuels with clean energy, experts believe that a breakthrough in this field is coming and will lead to a sustainable future.
Loloh Alhadlaq (Lulu)

- Class: Freshman
- Major: Electrical Engineering
- Family: Parents, 3 brothers, 2 sisters.
- Hobbies: Basketball, Volleyball, Running & photography
- Work: Electrical Engineer at the Ministry of Electricity & Water in Kuwait.
- “Be the change you wish to see in the world” – Gandhi.
Water pollution

- Problems: Marine dumping, industrial waste, radioactive waste, oil pollution and underground storage leaks.

- Side effects: Contaminated drinking water, toxic health problems, killing marine animals.

- Solution: Society created organizations to clean up beaches and the ocean (Clean Water Act). Educating the world on recycling.
Sources

• Hydraulic Fracturing

• Augmented Reality:
  http://mashable.com/2012/12/19/augmented-reality-city/

• Example of creative problem solving:
  http://www.youtube.com/watch?v=_ZyU6po_E74

• Water Pollution:
  http://www.nrdc.org/water/pollution/gsteps.asp