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Harvesting & Beneficial Use of Condensate from Air Conditioning Systems

Statement of the Problem

- The condensate from A/C units produces water of high purity that is currently wasted in spite of its potential for saving tap water.
- The biggest obstacle for harvesting A/C condensate are regulations. Building a system to tap into this condensate is not contemplated in the building's code and thus, it is not permitted.
- This IPRO will help reduce the barriers for accepting the use of this wasted resource through education of the general public and officials of the City of Chicago. This will be done by showing the potential to use this for

Goals of the Project

- **Build public awareness**
  - Set up social networking sites such as Twitter and Facebook
  - Correspondence with other organizations
  - Alter current policy to move forward the practice of harvesting air conditioning condensate.

facebook

twitter

Goals of the Project

- **Demonstrate different uses of the condensate**
  - Build a 3D model
  - Harvest and use condensate at IIT
  - Make an awareness video

Goals of the Project

- **Stimulate a government or environment organization to work towards implementing this idea.**
  - Draft ordinance
  - Draft resolution
  - Study Group
  - Advocacy Group

Organization of the Team

Create Public Awareness:

Create Twitter and Facebook Media Web-Pages

Add data, pictures & results to social media pages.

facebook

Search

Wall
Info
Photos
Friends

Friends (60)


Epsita Ananth


Narayan Natarajan
International Scho...


Sumeet Gill
Illinois Tech

IllinoisTech SavesWater

Studied at Illinois Institute of Technology · Lives in Chicago, Illinois · From Chicago, Illinois

Share: Post · Photo · Link · Video

Write something...

IllinoisTech SavesWater
On avg, an HVAC of a household produces 10 gal of condensate/day. Thats about 300 Gal/mth, 3600 Gal/yr. Thats plenty to fill a swimming pool!!!
June 22 at 2:56pm · Like · Comment

Mansi Patel likes this.

Write a comment...

RECENT ACTIVITY

IllinoisTech is now friends with Sunny Yang and 4 other people.
4 more similar stories

IllinoisTech SavesWater
Based on the Desert Water Agency 2002 Public Data, the average household uses up 72 gallons of water on lawns daily.
June 22 at 2:55pm · Like · Comment

Cheng Li and Mansi Patel like this.

Write a comment...

Maintain social media sites by updating as project moves forward and milestones are reached

twitter | Search | Home | Profile | Messages | Who To Follow | IIT_Saves_Water

IIT_Saves_Water

@IIT_Saves_Water IIT, Chicago, IL

Project to harvest and use air conditioning condensate in beneficial ways.

http://www.facebook.com/profile.php?id=100002489385079

Edit your profile →

Tweets | Favorites | Following | Followers | Lists

IIT_Saves_Water IIT_Saves_Water
An average usage per day for a family is 17 toilet flushes = 95 gallons
22 Jun

IIT_Saves_Water IIT_Saves_Water
Each toilet flush uses the same amount of water that one person in the Third World uses all day for washing, cleaning, cooking and drinking.
22 Jun

IIT_Saves_Water IIT_Saves_Water

About @IIT_Saves_Water

7	10	3	0
Tweets	Following	Followers	Listed

Similar to you · view all

ScottHarder Scott Harder · Follow
Clean water, a cooler climate, and green energy. Bee...

WWMD2010 WorldWaterMntrngDay · Follow
WWMD™ is an international education and outreach...

Skinks Ronnie Hall · Follow
Ronnie is interested in just about everything.

Following · view all

About Help Blog Mobile Status Jobs Terms Privacy Shortcuts Advertisers Businesses Media Developers Resources © 2011 Twitter

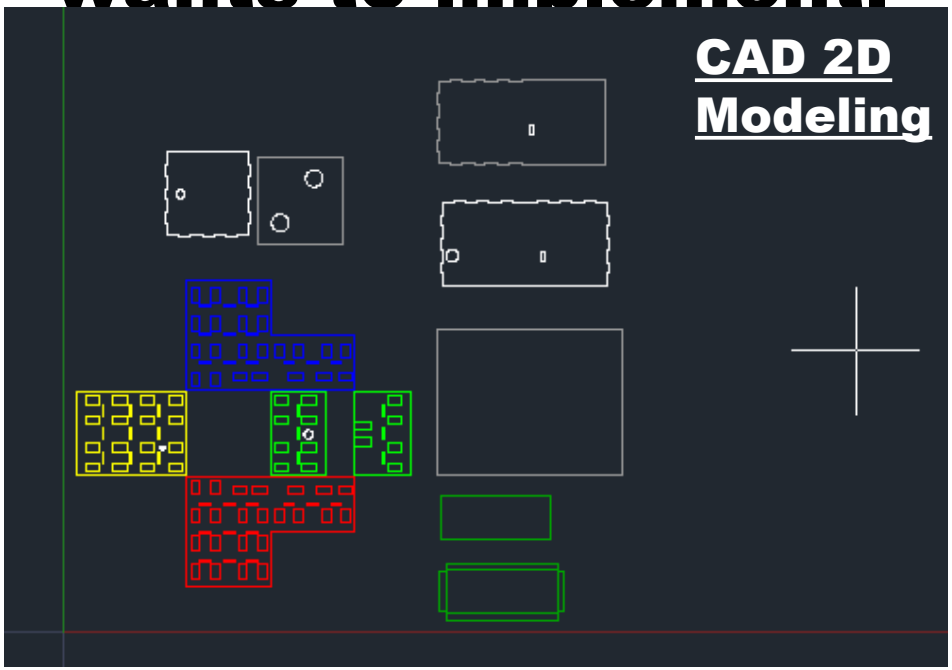
Present social media sites to governmental and environmental officials

Accomplish goals by having numerous followers and fans as possible.

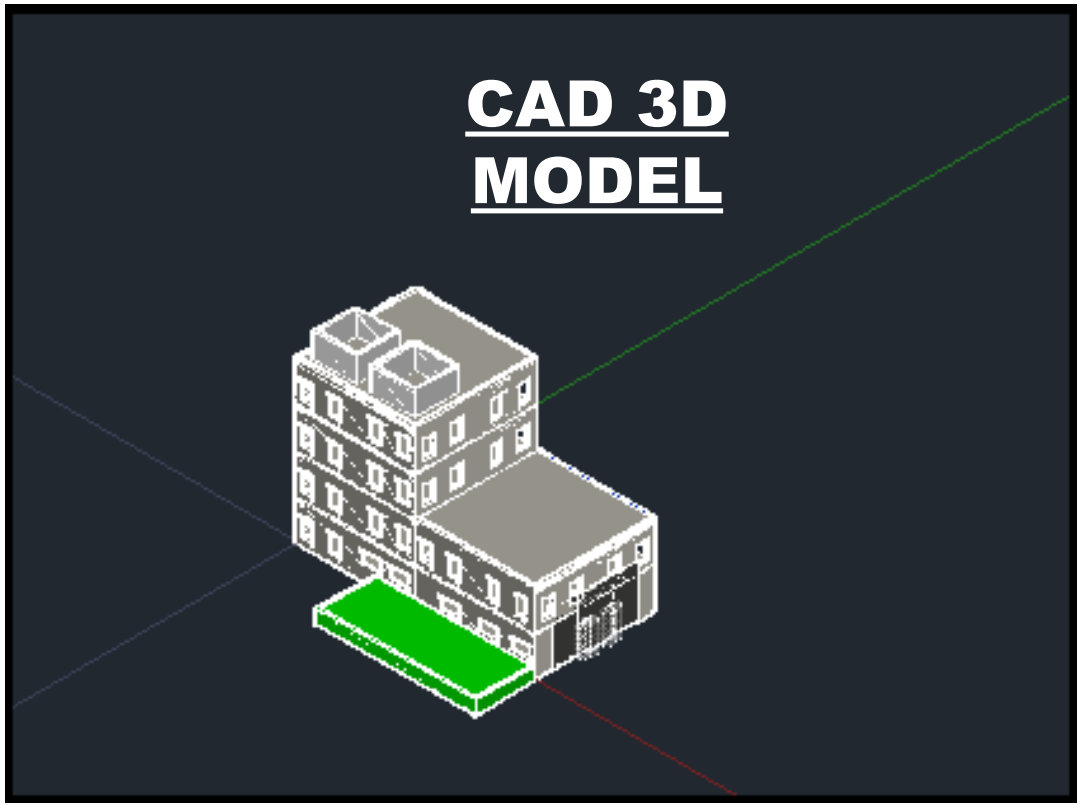
Organization of the Team

Full Size Model

Decide on prototype for presenting ideas that the group wants to implement.



Implement prototype in CAD 3D software to create full size model

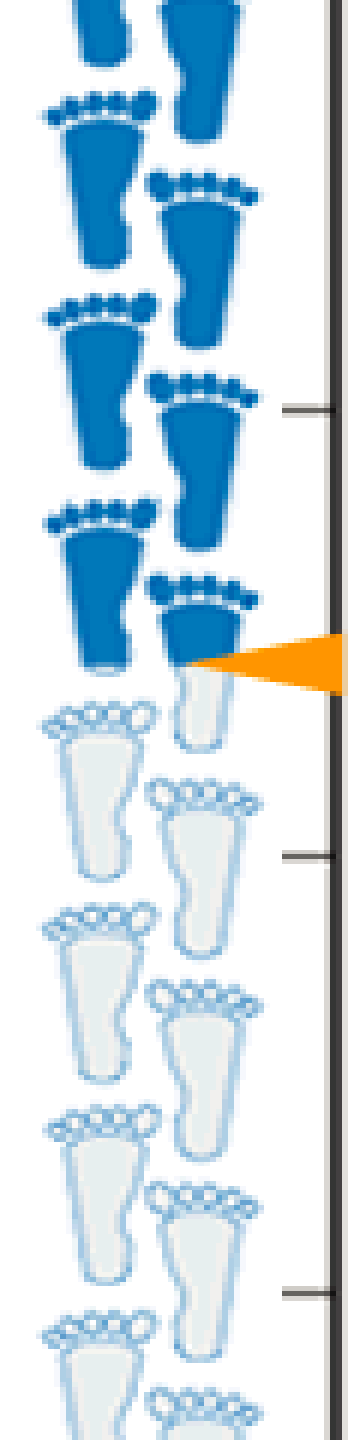


Prototype Team

Implement prototype in CAD 3D software to create full size

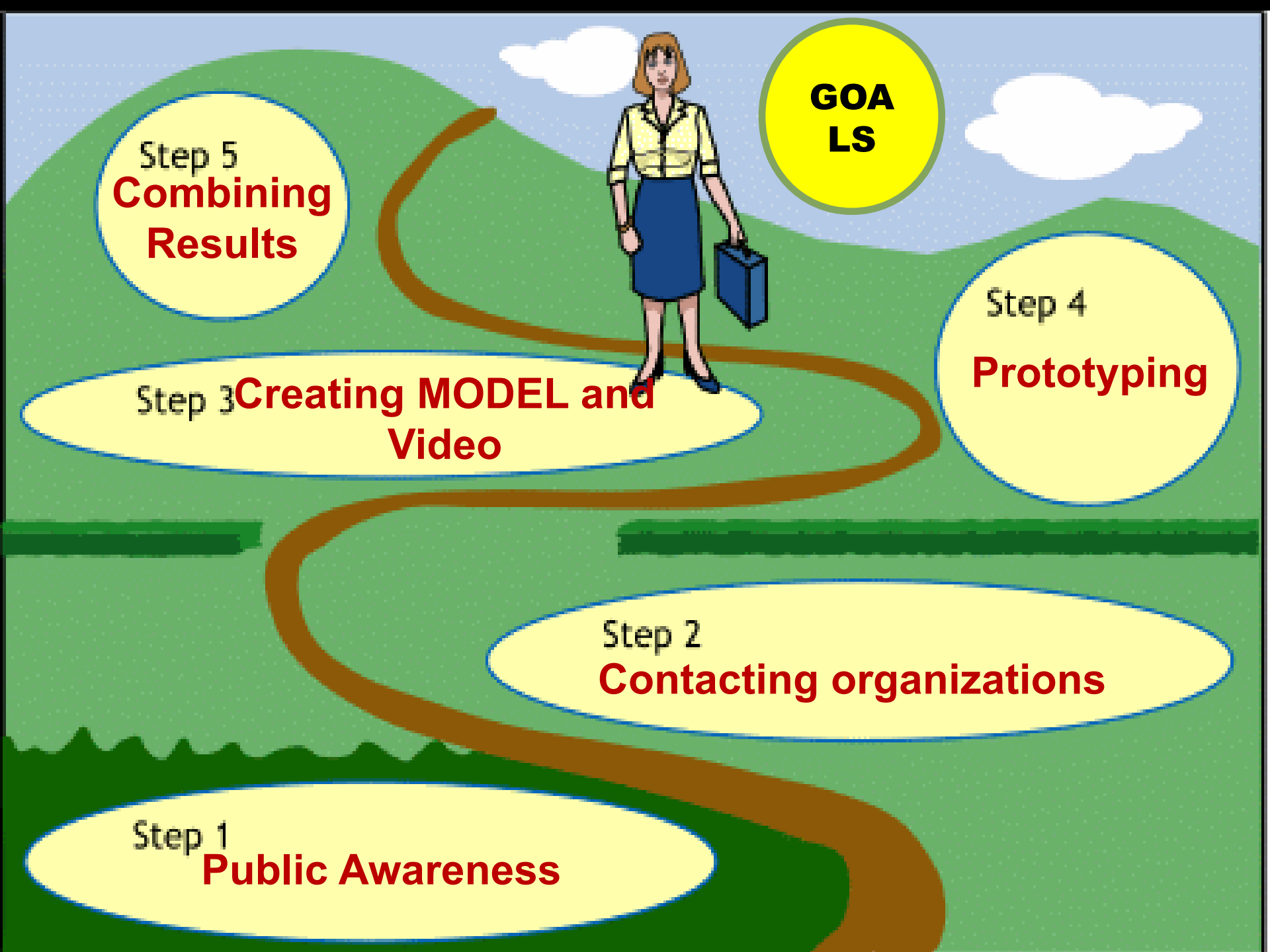
Create full size model to present to government and environmental entities.

Meet and display model to officials to represent our ideas and views.



PROGRESS TOWARDS GOALS

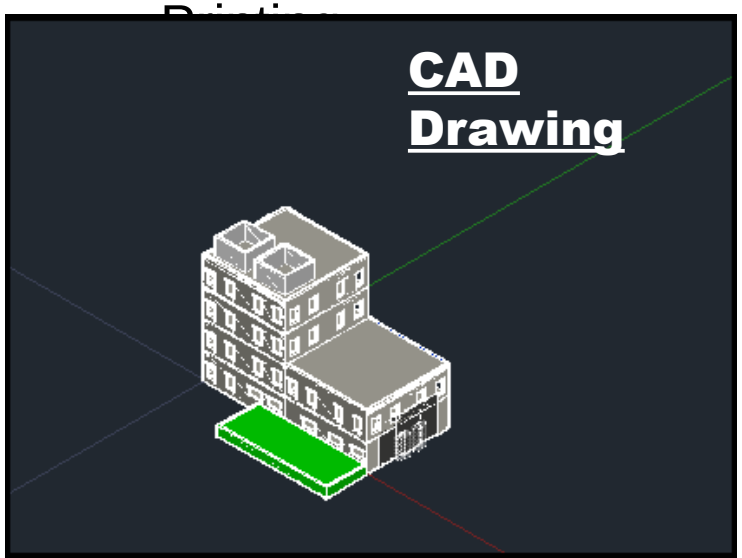
- **Spreading the word** : Facebook


GOA
LS
Step 5
Combining
Results
Step 4
Prototyping
Step 3 Creating MODEL and
Video
Step 2
Contacting organizations
Step 1
Public Awareness

Awareness video

Major Obstacles Encountered

- **CAD Design:**
  - Re-Learning 3D Modeling in CAD
  - Creating a Drawing Suitable for Demonstration
  - Modifying Drawing (scaling etc.) For



Major Obstacles Encountered

- **Getting a response from government organizations.**
  - Little response to emails
  - Little response to Phone Calls
  - Little response to social network
- **We have 121 followers so far on Facebook, whereas we have minimal response on twitter.**

Anticipated Major Challenges

- **One challenge our team faces is getting environmental and governmental entities to support our initiative**.
  - These entities might have different views/goals/approaches than us.
  - We plan to overcome this challenge by seeking to speak/meet with different groups and organizations, not just 2 or 3.

Anticipated Major Challenges

- **Secondly, our team might not always have the resources necessary to complete certain tasks or projects.**
  - Our team will need to have access to different air conditioning systems as well as land to try various

Helpful Support

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· The IPRO requires special permission from the Dean's office towards the implementation of a Prototype condensate collection and recycle system on IIT's Main Campus.

· The IPRO needs to use the Idea Shop's Rapid prototype printer towards the creation of an Illustrative model of How condensate can be collected and recycled in a commercial building.

facebook

· Support from IIT students and Faculty by spreading the message on the use of condensate through social media and by other means

twitter

Link of facebook and twitter

- http://www.facebook.com/profile.php?id=100002489385
- http://twitter.com/#!/IIT_Saves_Water

Questions??Comments?? Concerns??