

iMDE: international Market-Driven Engineering

Lecture 1: Introduction

2014-09-15



ZHEJIANG UNIVERSITY



LUND UNIVERSITY

Agenda

- 13.15-13.20: Welcome!
- 13.15-13.45: Presentation of the course-overview (Charlotta)
- 13.45-14.00: Introduction of the teachers
- 14.00-14.15: Break for 15 minutes
- 14.15-15.00: Presentation by students of their universities, cities and countries
- 15.00-15.15: Break for 15 minutes
- 15.15-15.45: Presentation of the project-idea, theme, film, and the groups (Charlotta)



Welcome

40 Swedish students

25 Chinese students

Team of teachers (5 Swedish and 5 Chinese)

Welcome everyone to the course "international
Market Driven Engineering (iMDE)"



Welcome

iMDE – international Market-Driven Engineering

This course will take you from “how to generate innovations”, though “the writing of Business Plans, and understanding Product development and Production” to the “how to sell and market a product”.



iMDE

iMDE – international Market Driven Engineering

“The world is becoming more international and cutting edge knowledge in marketing as well as engineering in a global world is becoming a valuable asset on the job-market. There is a lack of people with skills in both fields with the ability to connect market needs and innovations with product development, especially in an international context. International Market Driving Engineering is aimed at providing these knowledge and skills.”



iMDE

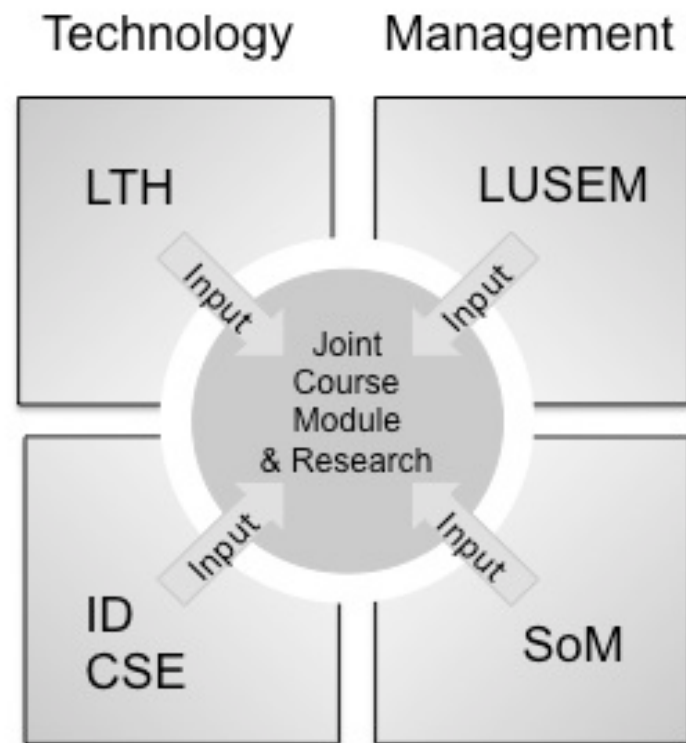
iMDE is a unique course!

It is a joint course that is truly international (Sweden and China) and cross disciplinary (Management and Engineering) .

-  **LUSEM:** Lund University School of Economics and Management
-  **LTH:** Lund University, faculty of Engineering
-  **SoM:** Zheijang University, School of Management
-  **ID and CSE:** Zheijang university, Industrial Design (ID) and Department of Control Science and Engineering (CSE).

Lund
University,
Sweden

Zheijang
University,
China



Input = Students, Teachers, Subjects and Cultures

iMDE

iMDE is a unique course!

iMDE is a joint course collaboration. It intertwines the two disciplines Technology and Management, in Sweden and in China, in four ways; Students, Teachers, Subjects and Cultures.

Students: 40 students from Sweden and 25 students from China.

33 students from Management/Economics and 34 students from Engineering

Teachers: 5 Swedish teachers and 5 Chinese teachers. A minimum of 2 teachers with different aspects of the subject matter will be present at each lecture. The course will contain both lectures and a project.

Subjects: Innovation and Product Development will be treated from the marketing/management perspective as well as from the Engineering perspective.

Cultures: China and Sweden. The cultural aspects of project management and business behavior will be treated in the course and practised in real life through the course project.

Course Content

Course start: Monday September 15th, 2014

The course will consist of:

- 10 Lectures
- 1 Project (performed in groups of 8-9 student)
- 2 Company visits

The examination of the course will consist of:

- Written project report, oral project presentation, short film

Course termination: Wednesday October 22 OR
Thursday October 23rd, 2014



Course Schedule

Lectures (approximately):

- Mondays at 9:00am-12:00am
- Wednesday at 9:00am-12:00am
- Friday at 9:00am-12:00am
- The lectures are held at Xixi campus, lecturehall D201, Art building

Project

- The project will be done as a groupwork. Teamwork to be managed by the team. There will be 6 coaching sessions.

Company visit

- There will be 2 company visits as part of the course.



Lectures

The course will take you from “how to generate innovations”, though “the writing of Business Plans, and understanding Product development and Production” to the “how to sell and market a product”.

- Lecture 1: Introduction
- Lecture 2: Innovation-1 (Inspiration)
- Lecture 3: Innovation-2 (Ideation)
- Lecture 4: Innovation-3 (Implementation)
- Lecture 5: Innovation-4 (Research visit at new campus)
- Lecture 6: Innovation cultures and Business plan
- Lecture 7: Product Development and Production
- Holliday
- Lecture 8: Marketing and Sales
- Lecture 9: Entrepreneurship
- Lecture 10: Final presentation



Coaching

There will be 6 coaching sessions.

Time: 9:00am – 12:00am or 13.00pm-16.00pm

Many teachers available.

Coaching-slots (20 min) for the project-groups to book.

The coaching-sessions should provide help to the project-groups in managing the project.



Project

- Projects to be performed in groups of 8-9 students
- The project should focus on Innovation and Product Development (prototypes)
- Project-theme 2014: "Clean Air"
- 1 group – 1 project – 1 innovation – 1 prototype
- Final presentation: written report, oral presentation, film
- More about the projects later



Company visits

1 research visit:

- Monday September 22nd: JORCEP

2 company visits:

- Wednesday September 25th: Volvo, Shanghai
- Thursday October 9th: Supcon



Course Schedule

Week	Date	Time	Lecture and content	Responsible teachers
36	1/9 (In conjunction with the TMAN50 (GTE) course.	13.15 – 16.00 See TMAN50 for more info regarding time and lecturehall	L-intro Introduction to iMDE for the Swedish students	TM-responsible
	3/9	13-15 Lecture hall to be announced	Extra lecture on aerosol	
37	8-12/9			
Week 38				<i>Må-Fr: Anders Warell</i> <i>Må-Fr: Charlotta Johnsson</i>
Week 38	Mo.15/9	9-11	Lcc (Introduction to ZJU)	International College
		13-16	L1 (Introduction)	Anders Warell, LTH Charlotta Johnsson, LTH Jun Jin, ZJU
	Tu. 16/9	9-12	L2 (Inspiration)	Anders Warell, LTH Charlotta Johnsson, LTH
		13-16	--	
	We. 17/9	9-12	L3 (Ideation)	Anders Warell Charlotta Johnsson, LTH
		13-16	Coaching-1 (1 hour per group)	Anders Warell, LTH Charlotta Johnsson, LTH
	Th. 18/9	2h (exact time not known)	Lcc (Chinese Culture: Survival Chinese)	International College
	Fr. 19/9	9-12	L4 (Implementation)	Anders Warell, LTH Charlotta Johnsson, LTH Jun Jin, SoM
		13-16	--	
Week 39				<i>Må-Fr: Anders Warell</i> <i>On-Fr: Damien Motte</i>
Week 39	Mo. 22/9	9-12	visit to JORCEP (new campus)	Erik Forsberg (JORCEP) Anders Warell, LTH Jun Jin, SoM, Qinmin Yang, CSE
		13-16	Coaching på JORCEP	
	Tu. 23/9	2h (exact time not known)	Lcc (Chinese Culture: Survival Chinese)	International College
	We. 24/9	9-12	L6 (Innovation cultures and Business plans)	Jun Jin, SoM Anders Warell
		13-16	Coaching-2 (1 hour per group)	Anders Warell, LTH Jun Jin, SoM,

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- 15.15-15.30: Presentation of the project-idea, theme, film, and the groups (Charlotta)



Teachers

The Swedish troupe:

- Anders Warell
- Damien Motte
- Carl-Henric Nilsson
- Charlotta Johnsson



Anders Warell

- PhD, 2002, Industrial Design Engineering
- Associate Professor, Industrial Design
- Research interests: design and innovation practices, product form and visual brand identity, and user experience centered design
- Wife Johanna, 2 sons (3 and 7)
- Enjoys long-distance running, high-altitude mountaineering and home building projects



Damien Motte



- Post-doc at the Department of Design Sciences LTH, Lund University
- MSc in Industrial Engineering, PhD in Machine Design
- Research interest: alternative engineering design and product development methodologies



Carl-Henric Nilsson

- Founder of Technology Management, 1997
- PhD Industrial Engineering
- Strategy, process-orientation, team-building and leadership
- Wife Guggy and three children
- Tennis, squash, sailing and golf
- Motto: Live, learn, deliver!



Charlotta Johnsson



- Responsible Technology Management Program 2008-present
- Ass.Prof. in Automatic Control (Ph.D. in 1999).
- Research interest: manufacturing operations, production control, process control and innovation.
- Husband Hans and three kids (15, 13 and 7).

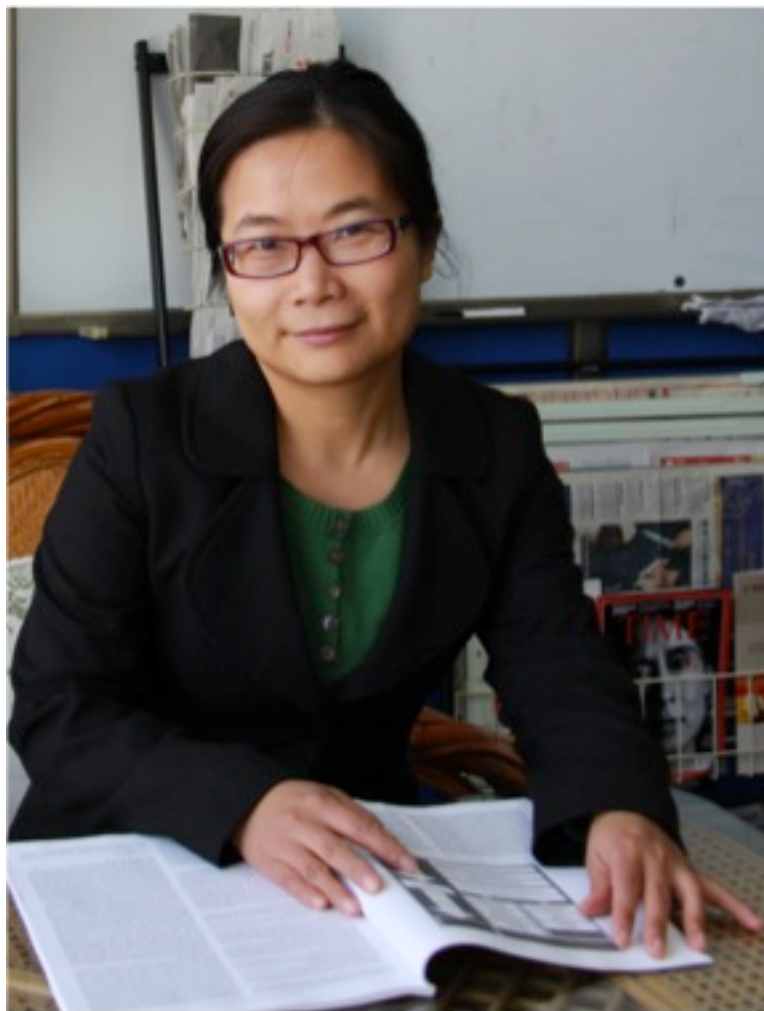
Teachers

The Chinese troupe:

- Jun Jin
- Qinmin Yang
- Shijian Luo
- Weiqing Xu



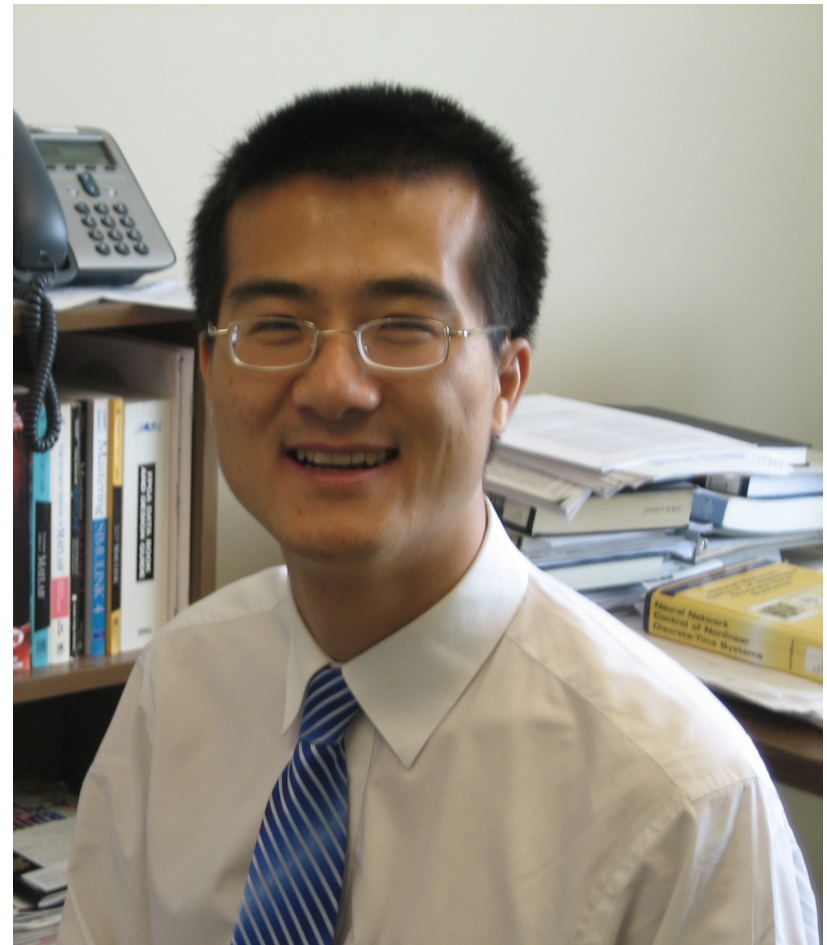
Jun Jin



- Ass.Prof. In Innovation and Technology Management (Ph.D. in 2005)
- Visiting Professor of UNU-MERIT (the Netherlands), PSU (US)
- Research interest: open innovation, reverse innovation, innovation capability, innovation and sustainable development

Qinmin Yang

- Ass. Prof. in Control Science and Engineering, ZJU
- Ph.D. in Electrical Engineering, 2007
- Co-Founder of ColTiTech Inc., 2003
- System Engineer, Caterpillar Inc., 2008
- Adaptive control theory, nano-robotics, wind power systems
- Hobbies: soccer, football, and zuqiu



Shijian LUO



- Ph.D. and Ass. Professor at Industrial Design (part of Dept. of Computer Science)
- Will not be in the lectures due to other conflicting engagements

Weiqing XU

- Ass. Prof. at School of Management, ZJU
- Ph.D. in Business Administration, 2005
- Deputy director of department of business administration, SoM, ZJU
- Research interest : services marketing, customer relationship management, user innovation



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Sweden

20-30 minutes presentation by the Swedish students about:

- Lund, Sweden
- Lund University
- Technology Management



China

15 minutes presentation by the Chinese students about:

- Hangzhou
- Zhejiang university
- (departments:
 - Industrial design (ID)
 - Control Science and Engineering
 - School of Management and Economics)



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Project

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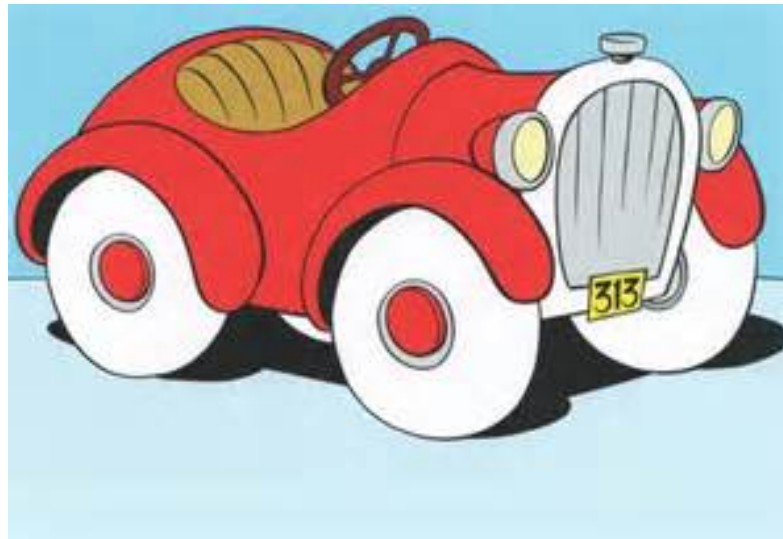
- Projects to be performed in groups of 8-9 students
- The project should focus on Innovation and Product Development (prototypes)
- Project-theme 2014: “Clean Air”
- 1 group – 1 project – 1 innovation – 1 prototype
- Final presentation: written report, oral presentation, film



Theme 2014: Clean Air



- Collaboration with Volvo Cars, Shanghai
- Clean Air in the car
- Clean air around the car
- The car generating Clean Air
- ... for the society
- ... for the next generations
- ... for our daily life
- ... for our environment
-for various places
- ... for everyone
- What does “Clean Air” mean to you?
- What do you see around you which is not “Clean Air”?
- How do you enjoy “Clean Air”?



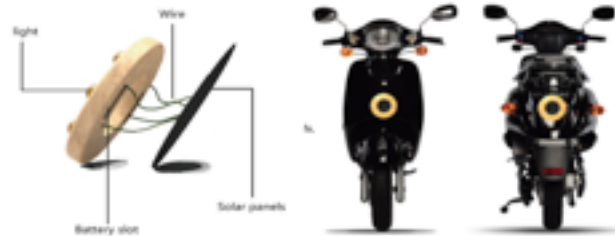
Project

- Work in groups of 8-9
- Practice teamwork – learn from each other
- Get inspiration from your daily life, come up with an idea, and realize it as a prototype.
- Coaching sessions will be offered.
- While working together, create a short (3 minutes) film about your work and the results
- At the final presentations you should present:
 - your prototype
 - written report including the business plan
 - The film “this is *how* we did and *what* we did”

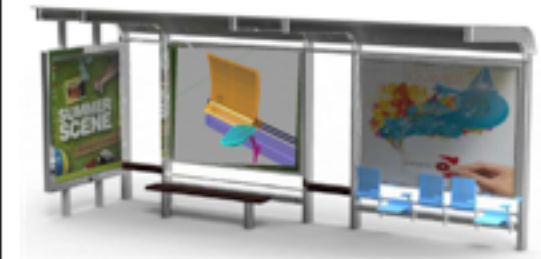


Theme 2012: Helping everyday life

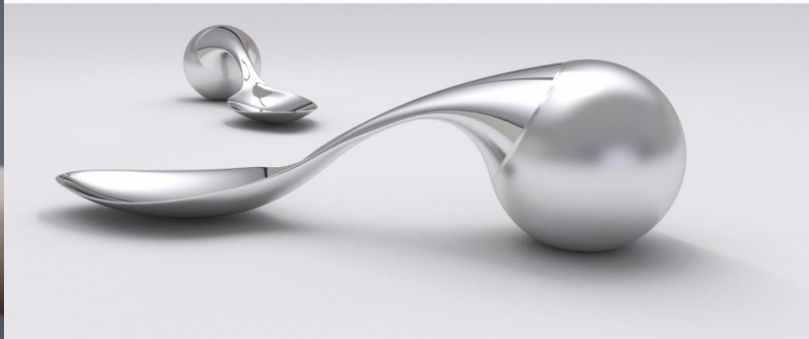




iMDE
the 8 prototypes



Theme 2013: Inclusion





UniteMe is a service for foreign students coming to a Chinese university



BackApper



iMDE 2013
8 prototypes
"Inclusion"



Technology Management



Groups 2014

Group	Swedish Students		Chinese Students		
	LUSEM	LTH	SoM	CSE	ID
1	Britta Ek-Thomas (F) Oskar Bill (M) Martina Nordensson (F)	Elin Alm (F) Olof Ed (M)	Shien LIN (M)	Danyan Zhou (F) Xin Jia (F)	Chen Kuan (M)
2	Elin Skoghagen (F) Jimmy Rhodin (M) Kajsa Andersson (F)	Andrea Tollstadius (F) Filip Eliasson (M)	Jun ZHOU (F)	Bin Zhou (M)	Li Guang (M)
3	Malin Andersson (F) Mattias Wessman (M) Paulina Winbladh (F)	Amanda Karlsson-Streffert (F) Jonathan Eng-Stensson (M)	Sujuan WANG (F)	Wenlun Yang (M)	Zhou Hao (M)
4	Alexander Lindgren (M) Malin Ek (F)	Elin Turesson (F) Victor Bodin (M) Susanne Carlberg (F)	Zhicheng FANG (M) Qi XIA (F)	Ruqi Yang (F)	
5	Emmy Luo Ferreira (F) Elin Melin Lundström (F) Karin Emilsson (F)	Kristina Widegren (F) Alexander Jöndell (F)	Bo ZHONG (M)	Yuan Wei (F)	Li Miao (F)
6	Nils von Essen (M) Julia Skäremo (F)	Emma Sandin (F) Gunnel Bildt (F) Jonas Rasmusson (M)	Zhenfeng GE (M)	Mengyuan Fang (F)	Gong Yan (F)
7	Anton Olivensjö (M) Paulina Hornay (F)	Johanna Gustafsson (F) Gustav Sundberg (M) Karin Östertröm (F)	Wenxi WANG (F) Feiyun WANG (F)	Zhiwei Zeng (M)	
8	Givi Kokaia (M) Therese Thörn (F)	Lovisa Bengtsson (F) Marcus Witting (M) John Elf (M)	Renheng FAN (M) Feiting YAN (?)	Lingxia Sheng (F)	

Groups 2014 (updated)

Group	Swedish Students		Chinese Students		
	LUSEM	LTH	SoM	CSE	ID
1	Britta Ek-Thomas (F) Oskar Bill (M) Martina Nordensson (F)	Elin Alm (F) Olof Ed (M)	Shien LIN (M)	Danyan Zhou (F)	Kuan CHEN (M)
2	Elin Skoghagen (F) Jimmy Rhodin (M) Kajsa Andersson (F)	Andrea Tollstadius (F) Filip Eliasson (M)	Jun ZHOU (F)	Bin Zhou (M)	Guangyu ZHOU (M)
3	Malin Andersson (F) Mattias Wessman (M) Paulina Winbladh (F)	Amanda Karlsson-Streffert (F) Jonathan Eng-Stensson (M)	Sujuan WANG (F) Qi WANG (F)	Wenlun Yang (M)	Hao ZHAO (M)
4	Alexander Lindgren (M) Malin Ek (F)	Elin Turesson (F) Victor Bodin (M) Susanne Carlberg (F)	Zhicheng FANG (M)	Ruqi Yang (F)	Yexing ZHOU (M)
5	Emmy Luo Ferreira (F) Elin Melin Lundström (F) Karin Emilsson (F)	Kristina Widegren (F) Alexander Jöndell (F)	Bo ZHONG (M)	Xin JIA (F)	Miao LI (F)
6	Nils von Essen (M) Julia Skäremo (F)	Emma Sandin (F) Gunnel Bildt (F) Jonas Rasmusson (M)	Zhenfeng GE (M)	Mengyuan Fang (F)	Gong YAN (F)
7	Anton Olivensjö (M) Paulina Hornay (F)	Johanna Gustafsson (F) Gustav Sundberg (M) Karin Östertröm (F)	Wenxi WANG (F) Feiyun WANG (F)	Zhiwei Zeng (M)	
8	Givi Kokaia (M) Therese Thörn (F)	Lovisa Bengtsson (F) Marcus Witting (M) John Elf (M)	Renheng FAN (M) Qi XIA (F)	Xueping LIU (?)	

iMDE prototype - FILM

Summary

- iMDE - a “fun and inspiring course”.
- Use your time wisely.
- At the final presentation Oct 22nd or 23rd, 2014, each team should:
 - Demonstrate your prototype
 - Present your written report including the business plan
 - Show your film “this is *how* we did and *what* we did”
- Enjoy!



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Thank you for your attention

See you again tomorrow!

