Forming Groups and Brainstorming Project 2- Lecture 14



Image by Dezeen: <u>link</u>

Mario Romero 2016/11/15



AGI16 Calendar: link

- Tue 30 aug 13:00-15:00
- Fri 2 sep 8:00 12:00
- Tue 6 sep 13:00 15:00
- Fri 9 sep 8:00 10:00
- Tue 13 sep 13:00 15:00
- Fri 16 sep 10:00-12:00
- Tue 20 sep 13:00 15:00
- Tue 27 sep 13:00 17:00
- Fri 30 sep 8:00 16:00
- Tue 4 oct 13:00 15:00
- Tue 11 oct 13:00 15:00
- Tue 1 nov 13:00 15:00
- Fri 4 nov 9:00 Sun 6 Nov 16:00
- Fri 11 nov 10:00 12:00
- Tue 15 nov 13:00 15:00
- Fri 18 nov 8:00-12:00
- Tue 22 nov 13:00-15:00
- Tue 29 nov 13:00-15:00
- Tue 6 dec 13:00-15:00
- Tue 13 dec 13:00-15:00
- Fri 16 dec 15:00-19:00

<u>Lecture 1</u>: Introduction

Lecture 2-3: Forming Groups and Brainstorming

Lecture 4: Groups formed, inspiration, and brainstorming

<u>Lecture 5</u>: Proposals

<u>Lecture 6</u>: Proposal Feedback <u>Lecture 7</u>: Hello World Demos

Lecture 8: Preparing ForskarFredag 2016

Lecture 9: Demo and preparation towards ForskarFredag

ForskarFredag (we set up on Thursday evening)

Lecture 10: Reflecting on ForskarFredag

<u>Lecture 11</u>: Preparing for Comic Con

<u>Lecture 12</u>: Preparing for Comic Con

Comic Con (we set up on Thursday evening)

Lecture 13: Reflecting on Comic Con

Lecture 14: Forming groups for project 2

Lecture 15-16: Proposals Project 2

Lecture 17: Hello World Demo Project 2

Lecture 18: Feedback on Demos

<u>Lecture 19</u>: Preparing for Open House

Lecture 20: Demo project 2

VIC AGI16 Open House

1. Announcements

6. Brainstorm

Agenda

1. Friday

Johan Kasperi
 Proposals

- 2. Assignment 5
- 2. Reflect on Comic Con
- 3. Example Proposals for Project 2
- 4. Examples of AGI15 P2s
- 5. Assignment 4 group work

Friday

Johan Kasperi is working on Augmented Reality tours of the newly proposed Nobel Museum. This project will work while walking or riding a bus.

video



- Johan Kasperi
 - BrARwl → Table Top Heroes
 - AR Nobel Museum
 - Q&A
 - Argon, Vuforia, Three.js, ...
 - Feedback → proposal drafts
 - 9:00 10:00
- Proposals
 - -10:00-12:00
 - 8 minutes each
 - You know what to do!

Assigment 5

For next Friday Nov. 18
We will discuss these in class

Read about

- Vuforia
- Argon.js
- WebGL
- Three.js
- MacIntyre, Blair, et al. "The Argon AR Web Browser and standards-based AR application environment." Mixed and Augmented Reality (ISMAR), 2011 10th IEEE International Symposium on. IEEE, 2011. PDF

Project 2 Guidelines



Mixed Reality Stockholm

- AR Guided Bus Tours
- AR Guided Walking Tours
- MR Guided Museum Tours
- Techonologies
 - Phones
 - Vuforia
 - Argon.js
 - WebGL
 - Three.js
- Not this please!
 - Link

Reflecting on Comic Congoo.gl/mXwdbD

- Talk to your neighborgs
- Discuss
 - What worked?
 - Better than expected
 - As expected
 - Not as well as expected
 - What was unexpected?
 - What did you learn?
 - What can you apply to P2?
 - What will you change for P2?
 - Other comments

Reflections from Comic Con 2016

AGI 2016-11-11

What Worked better than expected?

- Limited area
- Transition between projects and context switches.
- VR
- Highscore list
- Instructing childrens
- Crowd understood that it was not a perfect project
- Moving all the hardware
- Whiteboard highscores
- Little noise uptake of microphone

- Children can use the vive
- Phones battery consumption manageable
- Crowd control
- Interviews and news articles
- Only one person complained about motion sickness (on our project presentation)

What Worked as expected?

- Scheduling (except the first day's start)
- Catching attention through Pixelsense while queueing for HTC.
- A lot of interest for VR/the Vive
- We can draw a crowd!
- People like to play with friends

Hardware

What Worked not as well as expected?

- IR pollution
- A lot of kids had to small heads (and arms) for the Vive
- Vive controllers and headset was lagging
- Poster placement. Posters where not were the project was being presented.
- Queue organization problems
- Sometimes confusion where the users didn't know that Pixelsense and HTC were connected.
- Sound level
- In-game tutorials (language barrier)

- The queue
- Phone hardware limitations
- Wiimote precision imprecise
- Bugs!
- Moar bugs!
- Gameplay balance

What was unexpected?

- More people in queue
- The demographics
- Less cosplayers than expected that would have massive armor and make tracking harder (Kinect)
- Gameplay had higher replayability
- Number of people were fewer
- Pollution from the other Vive devices

bugs bunny

What did you learn?

- A lot of different technologies.
- Prefabs are the shit!
 - Examples?
- And also, game engines are good
- Møre people have experience with VR than expected
- We should spend more time testing the games
- Do not haphazardly combine technologies
 - Can you give examples?
- Do not use Wii-motes
- DO NOT EVER USE KINECT
- Sometimes showing people is better than telling them what to do.
- Unexperienced users provide valuable insight.
 - Examples?

- Psvr has potential, fo sho
- Networking sucks (+4)
- Language barrier for small kids
- People worry about how they look while playing and do not want to look weird
- The need for a graphical artist
- That people only gives feedback on the physical color of a tower.
- Contacting PR can be a challenge
 - Meaning?
- Color perception change
- Kids prefered to play against each other rather than cooperate
- The PixelSense attracts people
- Games development is a huge time-sink
 - Why?
 - What to do about it?

What can you apply to P2?

- Start prototyping early
- Choose easily available hardware
- Get your hands dirty as soon as possible
- Make more intuitive, should not require tutorial
- Try to reuse as much as possible.
- Stay away from networking (+1)
- Previous knowledge in engine of choice.

- Not to use wiimote, kinect
- More focus on gameplay
 - If it is a game...

What will you change for P2?

- Change game engine
- Now focused, less weird stuff
- More weird stuff
- No networking (hopefully)
- Focus on a single **reliable** technology.
- Concrete plan before starting to develop

• Try to get a graphical artist

Other comments?

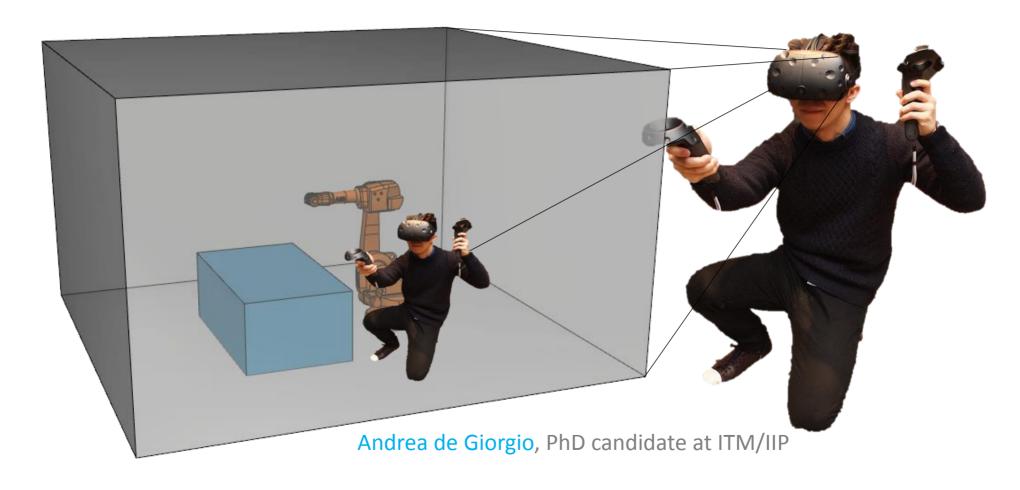
- (づらら)づ
- (* 5*)
- (つべC)
- Fun was had = = = = = = = = =
- Make comic con great again

 People's goals and interests are important and how we align these are crucial to the end result

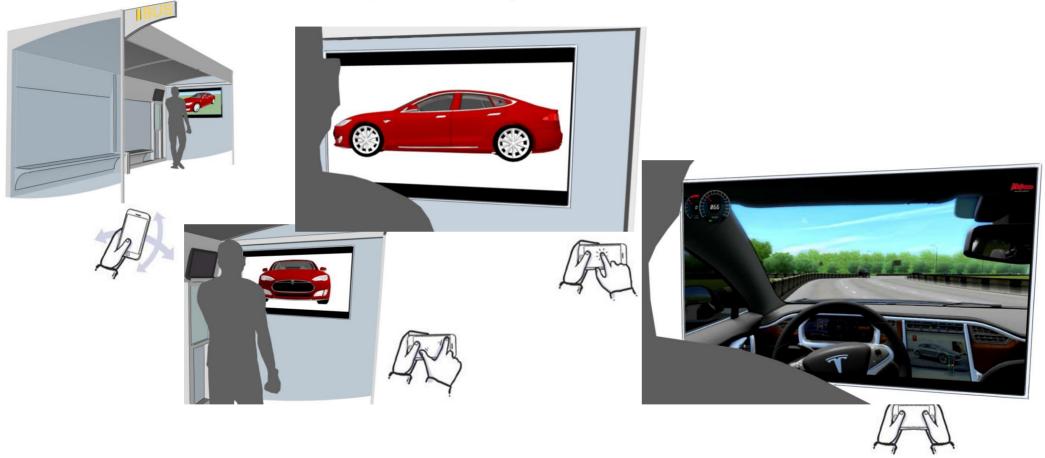
Proposed Ideas

- 1. VR Robot behavior modeling
- 2. PARADE
- 3. MyCraft
- 4. The Rock
- 5. The Crowd
- 6. gARffiti
- 7. XcavatAR
- 8. AR Tidebannan
- 9. Future Stockholm AR
- 10. Past Stockholm AR

Virtual reality can bring the operator in the "cage"

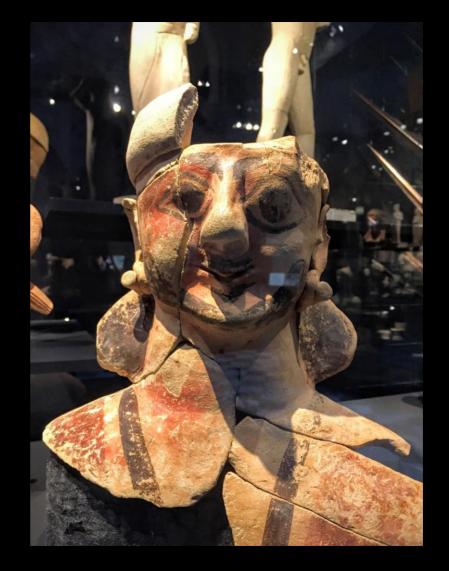


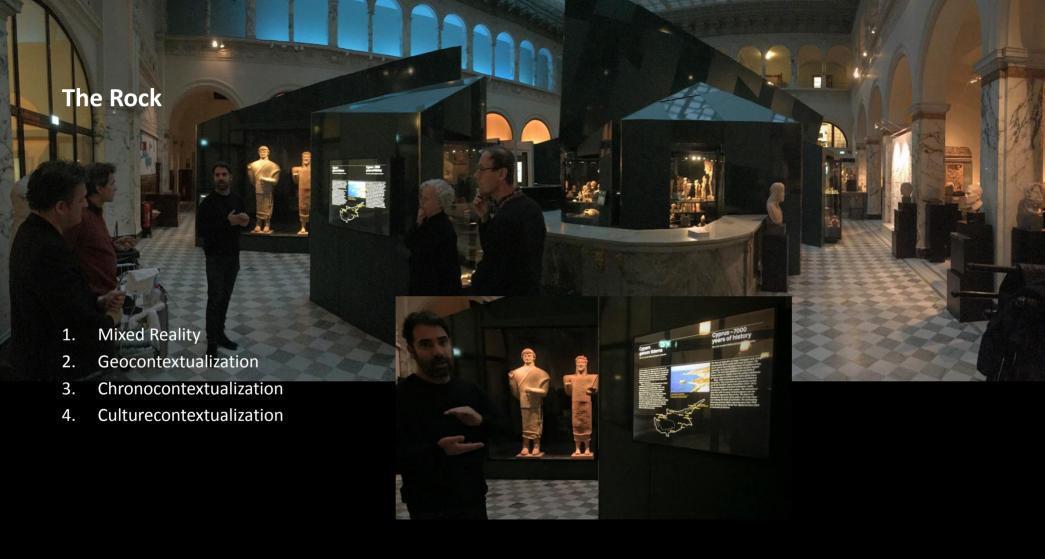
PARADE: Public Augmented-Reality ADvertising Experiences



MyCraft

- 1. AR
- 2. Interactive
- 3. Expressive
- 4. Sharing
- 5. Extended Museum Experience







ı vända mot ett altare och en kultsten.

keppades hälften av fynden till Sverige listånd från den brittiska kolonialregeroch för första gången visas nu nästan ssa figurer. Den andra hälften av fynden å Cyperns museum i Nicosia. petween the ancient cities of Soil and Lapithos. It was in use from ca. 1200 BC to the 1st century BC with some intervals of neglect. Much later, a small church for xyla Irini (Holy Peace) was built on the same site.

The sanctuary is famous for the spectacular finds made during excavations in 1929 by Erik Sjöqvist. About 2000 terracotta statuettes



ryttarfigurer stod bland de många fotsoldaterna.

iter
flesta figurer är små enkla avbildningar av fot(15). De har skägg och bär kontiska hjälmar, men
utturstade med sepen eller skildet (16). Dessa figurer
e framför altaret, utan 1 två grupper öster och vister
er framför altaret, utan 1 två grupper öster och vister
er filmför altaret, utan 1 två grupper öster och vister
er filmför altaret, utan 1 två grupper öster och vister
er framför altaret, mån nin skildet och skild

The Archaic period: ca. 700–500 BC

This was the most important period of the sanctuary, when most of the approximately 2000 terracotts figunder the sanctuary of the sanctuar



r otsoldaterna päträffades också små figurer av flöj de mån (17) och enstaka kvinnor som spelar

egypstiska eller egypetiserande skarabder (skallbaggi-1 (20) var deponerade vid kultplatsens ingångar, och lit toch utanför kultbyggnaden, vilket iker dess rituella betydelse.

The socred stone.

The storne (I) such the sanctuarry in Ayria Irist belongs to a special class of cold stone (I) at the sanctuarry in Ayria Irist belongs to a special sass of cold stones that are small, portable, and rounded. They are primarily stones from the procedure associations in Lebinon, Turnisia and Kalaba. The stem shortly-comes from the Semilic word shortly described hereafty means shouse of Godd (Iold Tetunest Godd, 188 tills). A sacred stone stood in the sanctuarry of the same of Godd, and the shortly comes.

n Greece, the farnous omphalos (navel of the world) at Detohi was a dome-shaped betyl, and in a sanctuary in Tyros in Phoeicia, the Greek historian Herodotos saw a pillar of solid gold Others again carried a sword, often with a fine pommel ne sculpture depicts a bearded man carrying an Egyptian hist symbol (9), and a fine limestone sculpture clearly ipicts a man with African features (10).

Person with bull mosk
A fine statuette of a person wearing a bull-mask stood right in front of the altar and the sacred stone (11).

controls

A number of terracotta figures of lavish war chariots drawn
by four horses with fine and expensive equipment are driven
by a chariotere and one or two warriors, who often have expensive armoury. One charioteer has an Egypelan hairstyle
(12). These, no doubt, high ranking warriors stood in a semicir
cle in the finent row, facing the allar.

Warniors from Systia or Anatolia Three small boronce warniors are of a type known from Systia and Anatolia. The persons who dedicated them must have enjoyed a special status; one figure stoot together with the large scuiptures, a second figure was found close to the altar near a club or sceptire of stone (13) and a third in the area of the old, from Age altar.

Horsemen
Several small figurines of horsemen were standing in the crowd of foot soldiers. They wear helmets which identify the as warriors (14).

Foot salders by the buyest amount of figures are small, unsophisticated apprecisations of foot solders 113. They are besented and expressionations of foot solders 113. They are besented and with usequons or challeds 116. There figures did not stand directly in front of the altax, but were placed in two stanger groups to the east and vest of the last. Small groups off foot solders when accompanying tage scopered of high tracking pression standing more trademed in the case.

Musicians
Small idols of male flute players (17) and a few small idols of
female tambourine players (18) and ring dancers (19) were
found among the foot solidiers.

Scarabi
Egyptian or Egyptianizing scarabs (20) were deposited on masse at the entrances to the sanctuary, but above all along the food of the holy shelter and inside it providing further evidence for the holiness of this structure. 1. Mixed Reality

2. Geocontextualization

3. Chronocontextualization

4. Culturecontextualization



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gARffiti

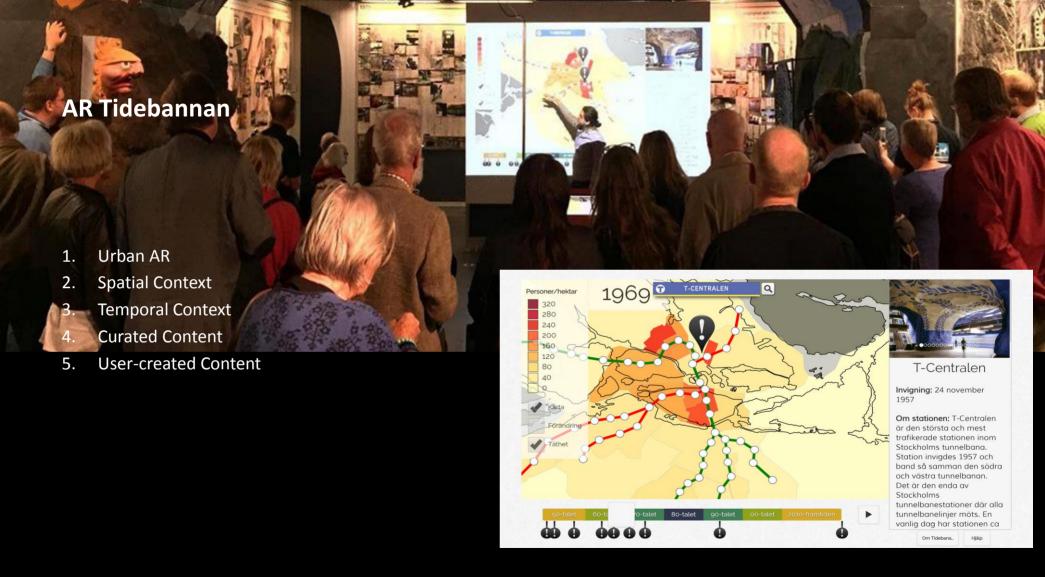
- 1. User generated 3D sketches
- 2. Contextual placemente
 - 1. Space
 - 2. Time
 - 3. People tagging
 - 4. Social Networking
- 3. AR connectivity
- 4. Special Effects
- 5. Interaction
- 6. Animations



XcavatAR

- 1. Mixed Reality
- 2. Archeological finding
- 3. Discovery
- 4. Content Creation
 - 1. Leave traces behind





Future Stockholm AR

- 1. AR
- 2. Models
- 3. Occlusion
- 4. Shadows
- 5. Light
- 6. Atmospheric Effects



Past Stockholm AR

- 1. AR
- 2. Models
- 3. Occlusion
- 4. Shadows
- 5. Light
- 6. Atmospheric Effects



The basics

- Mixed Reality
- Experience
- Learning
- Sharing
- Exploring
 - Space
 - Time
 - Culture

Assigment 4 & Group Forming

- 1. Break up into groups where at least one person read the papers
- 2. Pull out the papers and present them to those who did not read them
- 3. Ask and answer questions
- 4. Discuss how you can incorporate the lessons from the paper into project 2
- Brainstorm what you would like to do in project 2
- 6. Think about forming new groups

- Please, read these four papers and be ready to answer a few short questions and to discuss the papers next lecture, on November 1.
 - 1. Morgan McGuire and Andi Fein, Real-time rendering of cartoon smoke and clouds.
 - Smoke, Cartoon, Non-photorealistic rendering
 - 2. Mine, M., Yoganandan, A., & Coffey, D Game controller design, Immersive game experience, Virtual reality
 - 3. Foltin, Martin (2011)., Automated Maze Generation and Human Interaction
 Procedural generation, mazes, algorithms
 - 4. Plemmons, Daniel; Holz, David, Creating next-gen 3D interactive apps with motion control and Unity3D.

 Motion controller, Game engine, natural interfaces

And the P2 Groups are...



1. PARADE:

Alan Abdlwafa, Hansjörg Hofer, Ludwig Sidenmark, Wei Wang, Xu Han

2. viRobot:

Andreas Linn, Rodrigo Rodriguez, Lisa Schmitz, Haisheng Yu

3. BroschAR:

Emil Westin, Kevin Whittaker, Mikael Knutsson, Calle Stenson, Martin Hedlund, Joakim Larsson

4. ARchitect:

William Schröder, **Mihael** Marović, **Ahmed** Assal, **Halit** Dönmez

5. WindEye:

Adrià Cruz, Emilio Lando, Björn Englesson, Robin Tillman, Jack Shabo

6. AR Hunt:

Max Lindblad, **Henrik** Karlsson, **Yinglai** Xu

7. bARk:

Samuel Ekne, Fredrik
Berglund, Marcus Ahlström,
Karl Gylleus, Erik Eriksson,
Staffan Sandberg

3. radAR:

Nico Palmroos, **David** Ringqvist, **Yuchen** Qiu, **Domagoj** Penić

9. Banana4scale:

Eric Blomquist, **Rasmus** Elmgren, **Ewoud** van der Heide, **Erik** Markström, **Ingemar** Markström

10. GlobetrottAR:

Rickard Bergeling, **Kalle** Andersson, **Erik** Forsberg, **Arvid** Sätterkvist, Anton Siverstsson

Questions?

