Team TheTalkies

IS480 IS Application Project

Midterm Presentation

Team TheTalkies

Aung Myint Thein

Khaing Pwint Wah

Kyaw Moe Hein

Phyo Wint Wint Tun

Soe Thet Aung

Thandar Tun

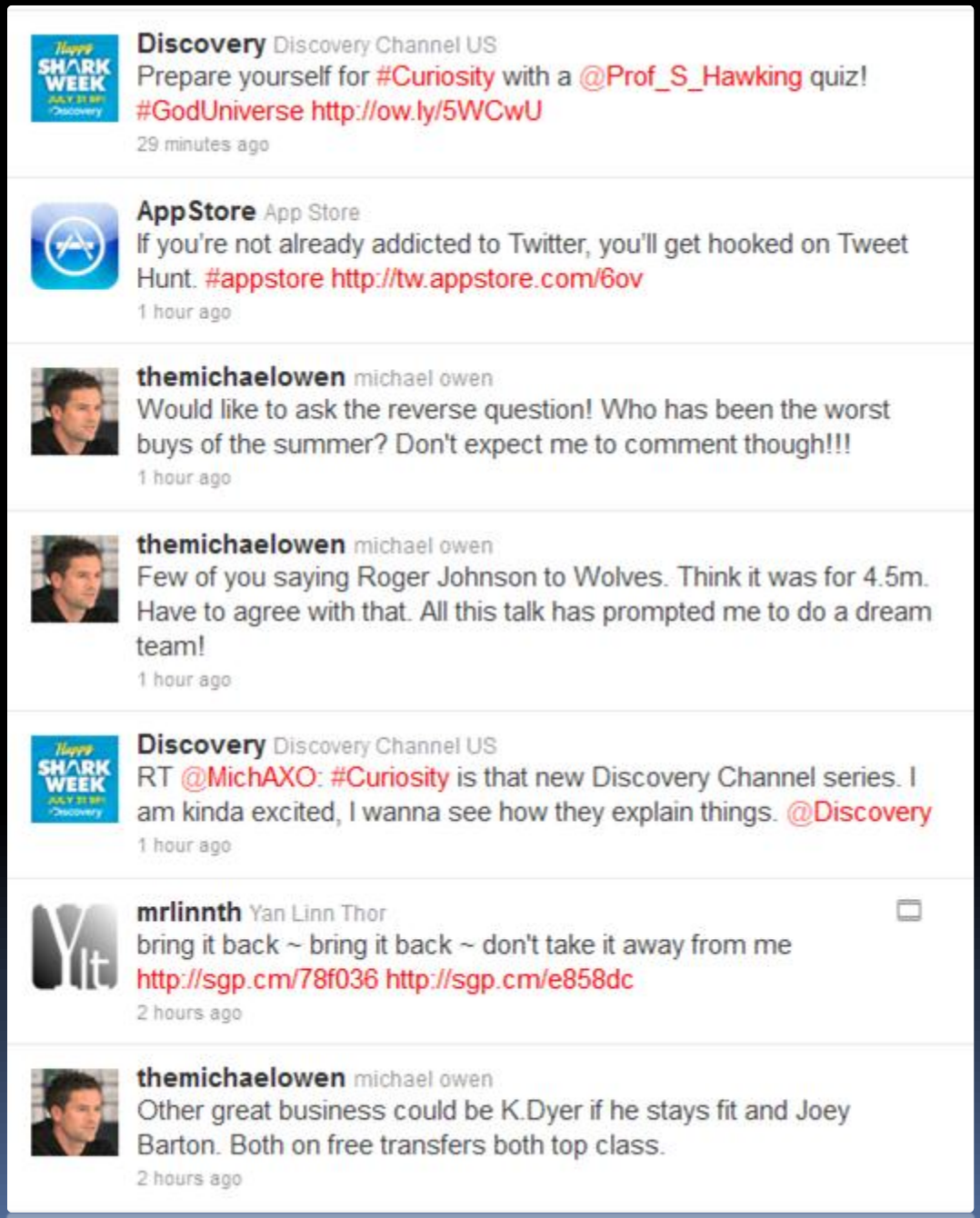
Content

1. Introduction of 3DSocializer
2. Demo
3. Technical complexity
4. Schedules
5. Metric, risk and mitigation plan
6. UAT
7. Lessons learned

Introduction to 3DSocializer

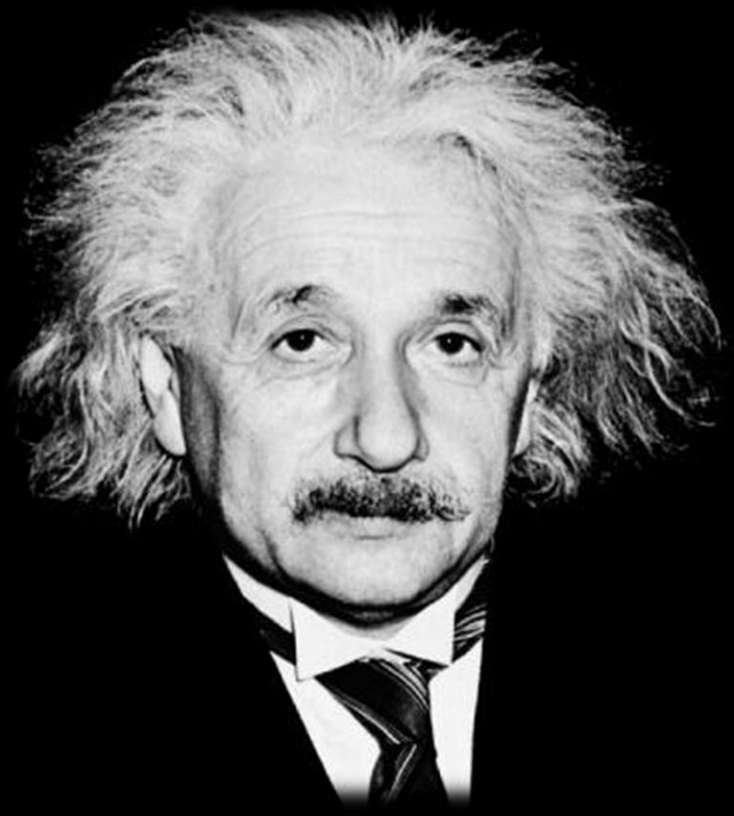
3DSocializer

- customized twitter dashboard
- simplified 3D model of SMU
- based on location and trends



Original Twitter

- Order by time

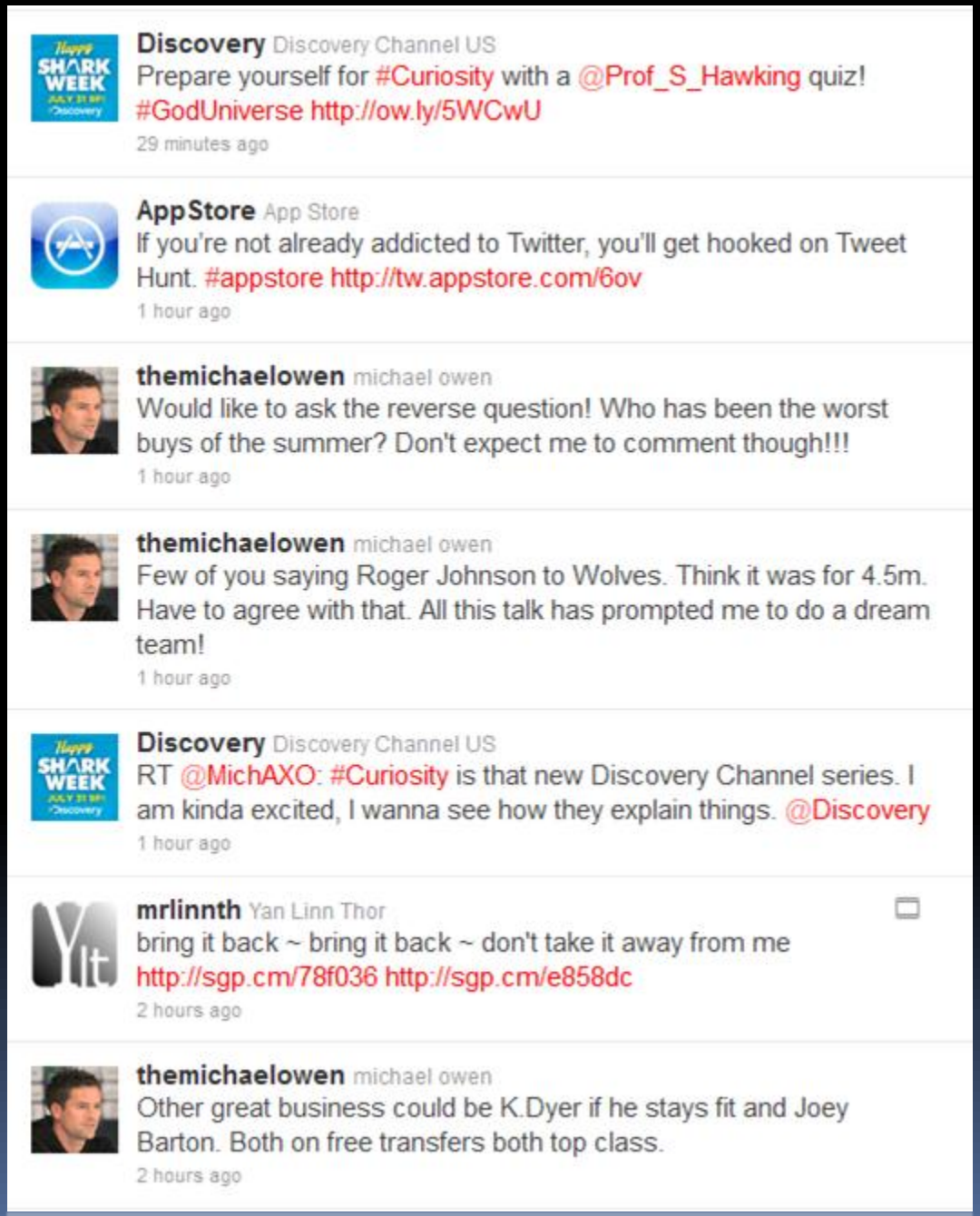


Albert Einstein

4 dimensions

X, Y, Z, Time

So near yet so far



Original Twitter

- All text

A new level of visualization

Features

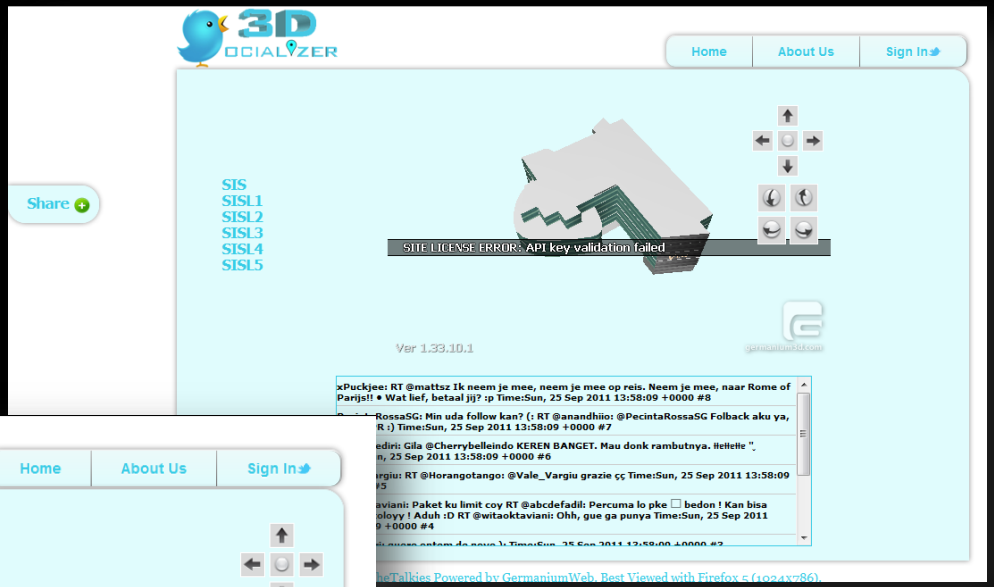
Acceptance

- Retrieving Tweets
- Front-end UI v1.0
- SIS 3D Model

Midterm

- Trend
- Lost and Found
- Tweet/Discuss
- Germanium API v1.3 to v1.5
- Front-end UI v1.1
- SESS, Library, SOB Models

User Interface



Application Demo

Technical Complexity

Dynamic Placemarks

3D Model

Twitter API

Placemarks array

REST

Germanium API

AJAX

Tweets array

Glide to Placemarks

3D Model

↑

Placemarks array

↑

Germanium API

↑

Tweets array

Trends

Twitter API

↓

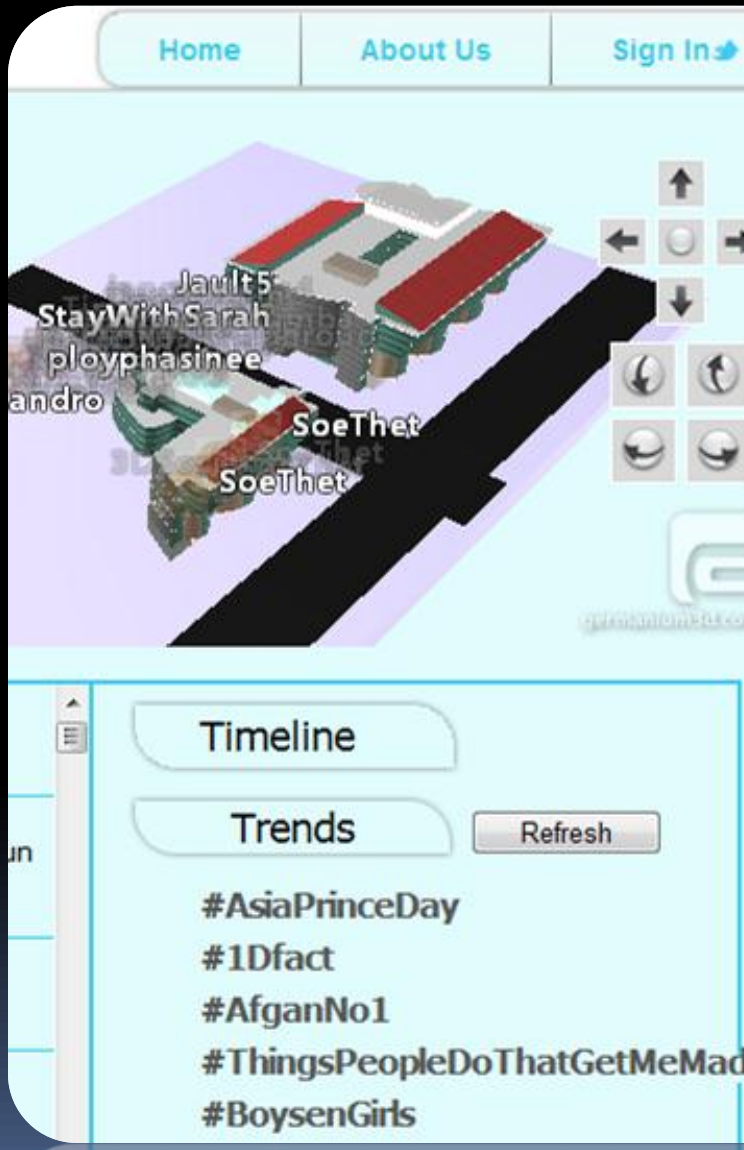
Server

↓

Database

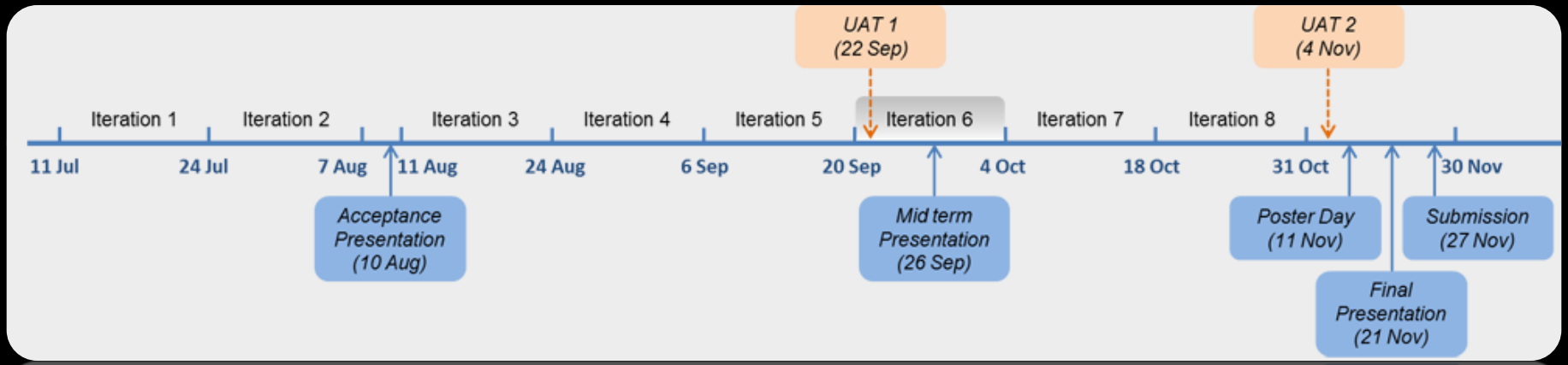
↓

UI



Schedule

Schedule



Iteration 1

- Retrieving Tweets
- Learning 3D Max

Iteration 2

- Front-end UI
- SIS Model

Iteration 3

- Trend
- SESS Model

Iteration 4

- LostnFound
- Library Model

Iteration 5

- Tweet/Discuss
- SOB Model

Iteration 6

- Stat/Log
- SOA Model

Iteration 7

- Friend Stream
- UI Revamp

Iteration 8

- Code Cleaning
- Final Testing

Planned Schedule in Details

Iteration 3 11-Aug -> 24-Aug							
No	Task	Description	In Charge	Other Members	Start Date	End Date	Duration
1	Modeling SESS	Modeling SESS builing in 3D	Aung Myint Thein	Soe Thet Aung	11-Aug	19-Aug	9
2	Database		Thandar Tun	Khine Pwint Wah	11-Aug	19-Aug	9
3	Trend Page						1
	Server Side	Codes to retrieve the tweets and decide the trends on server side	Phyo Wint Wint Tun	Thandar Tun	11-Aug	24-Aug	14
	Client Side	Codes to retrieve trends words from server and updating the time line accordingly.	Soe Thet Aung	Khine Pwint Wah	20-Aug	24-Aug	5
	Germanium	Codes to connect the 3D model and the trend page accordingly	Kyaw Moe Hein	Aung Myint Thein	11-Aug	24-Aug	14
4	Mock Up	Create full mock up pages for wireframing as Sponsor requested	Kyaw Moe Hein	Aung Myint Thein	11-Aug	24-Aug	14
5	Test Plan	Creating test plan for unit testing	Khine Pwint Wah	Aung Myint Thein	11-Aug	17-Aug	7
6	Misc	Improving wiki based on the Acceptance Presentation Feedback	Aung Myint Thein	Khine Pwint Wah	11-Aug	24-Aug	14

Actual Schedule

Iteration 3							
No	Task	In Charge	Other Members	Status	Start Date	End Date	Duration
1	Modeling SESS	Aung Myint Thein	Soe Thet Aung	Done (Delayed)	11-Aug	22-Aug	12
2	Database	Thandar Tun	Khine Pwint Wah	Done	11-Aug	19-Aug	10
	2.1. Database Structure				11-Aug	17-Aug	7
	2.2. Database Create				17-Aug	19-Aug	3
3	Trend Page				11-Aug		
	3.1. Server Side	Phyo Wint Wint Tun	Thandar Tun	Done (Delayed)	11-Aug	31-Aug	21
	3.2. Client Side	Soe Thet Aung	Khine Pwint Wah	Done (Delayed)		Aug	19
	3.3. Germanium	Kyaw Moe Hein	Aung Myint Thein	Done		Aug	21
4	Mock Up	Kyaw Moe Hein	Aung Myint Thein	Done	11-Aug	24-Aug	14
5	Test Plan	Khine Pwint Wah	Aung Myint Thein	Done	11-Aug	17-Aug	7
6	Misc	Aung Myint Thein	Khine Pwint Wah	Done	11-Aug	24-Aug	14

End Date
24-Aug

Action Plan

Estimated Delay Days	Actions
If x < 0	Consider for performance optimization
If 0 < x <= 1	On track and no action will be taken
If 1 < x <= 3	Ask the member to put in more effort and commitment
If 3 < x <= 5	Assign one or more member to speed up unfinished task
If 5 < x <= 7	All team members will become involved in unfinished task
If x > 7	Schedule an emergency meeting to discuss and find out for the reason of lateness and decide to drop functions as a worst-case scenario.

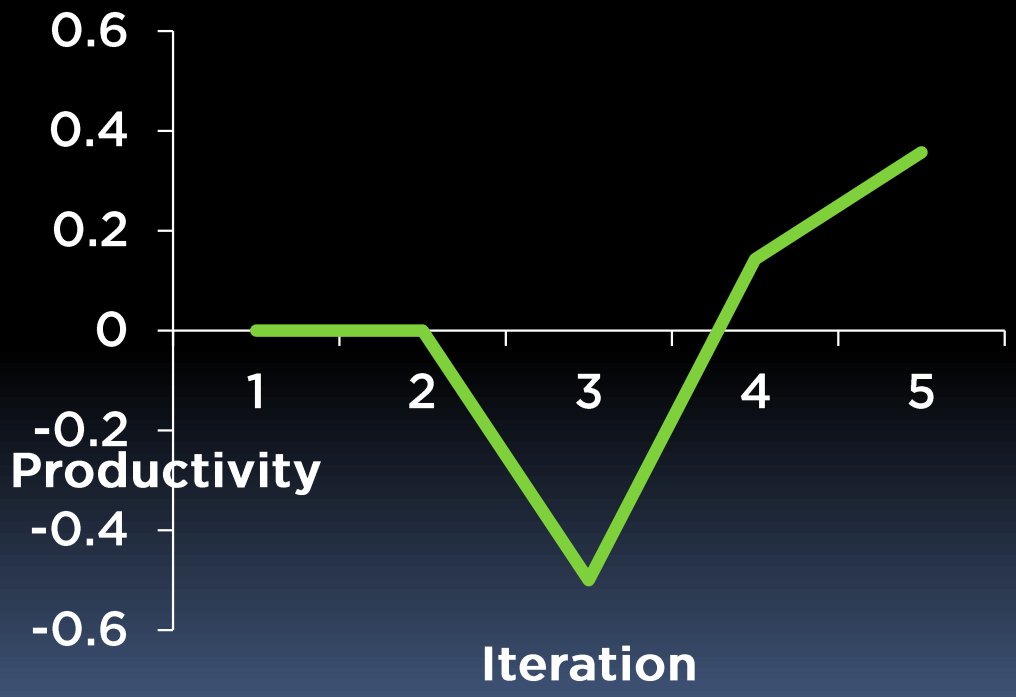
Highlight: Delay in iteration 3

Iteration 3				
No	Task	Status	Start Date	End Date
1	Modeling SESS	Done (Delayed)	11-Aug	22-Aug
2	Database	Done	11-Aug	19-Aug
	2.1. Database Structure		11-Aug	17-Aug
	2.2. Database Create		17-Aug	19-Aug
3	Trend Page		11-Aug	
	3.1. Server Side	Done (Delayed)	11-Aug	31-Aug
	3.2. Client Side	Done (Delayed)	11-Aug	29-Aug
	3.3. Germanium	Done	11-Aug	31-Aug
4	Mock Up	Done	11-Aug	24-Aug
5	Test Plan	Done	11-Aug	17-Aug
6	Misc	Done	11-Aug	24-Aug

- 7 days delay
- Cultural show event
- Underestimation
- Effort and productivity

Team Productivity

Productivity = (Planned Duration – Actual Duration) / 14



Bug Tracking

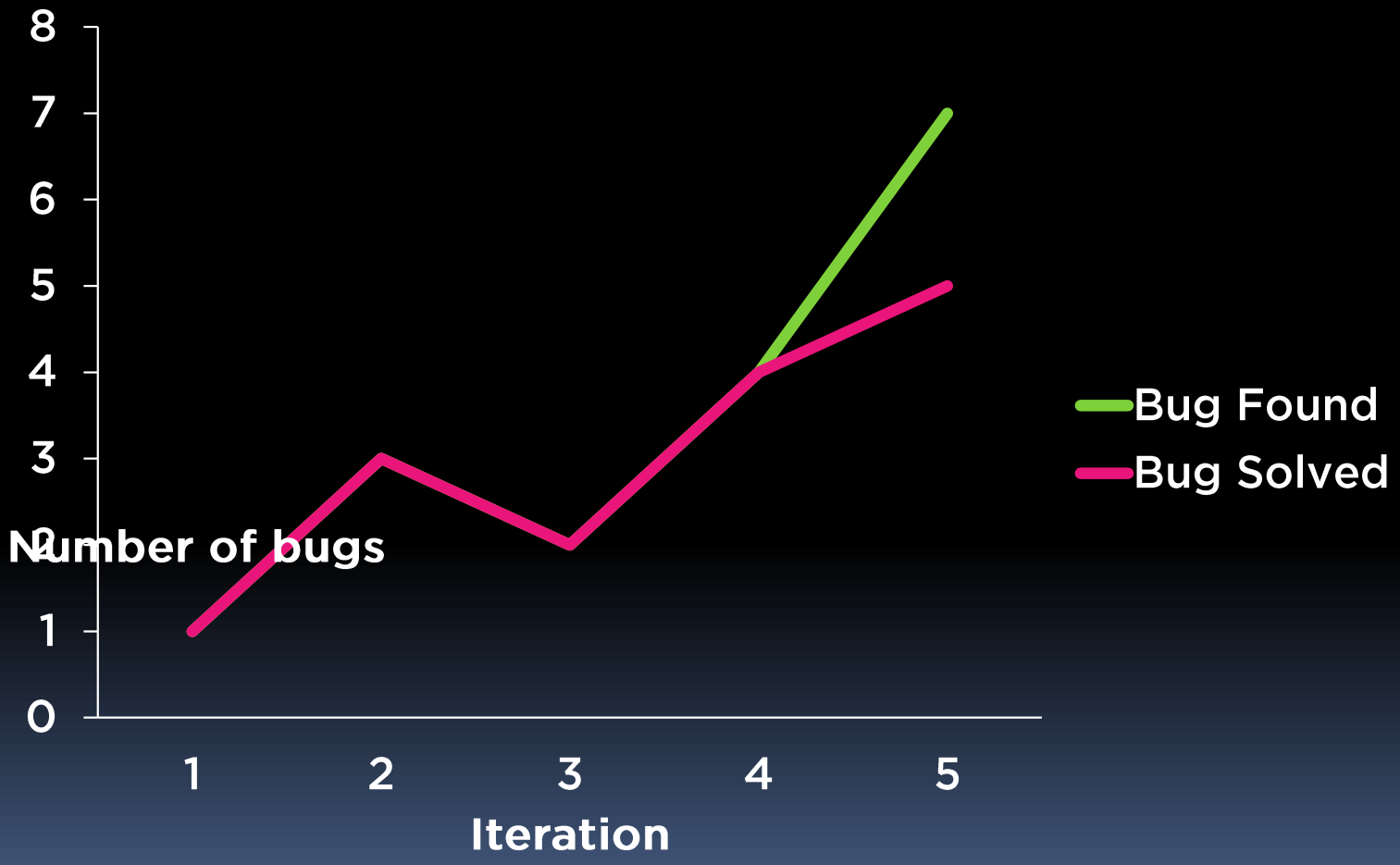
- Bug Reporter – Every Team Member
- Bug Solver – Assigned by bug reporter
- Bug Severity – (Difficulty * Bug Type) /16

Bug Tracking

Bug ID	Description	Type	Level of Difficulty (Estimated)	Severity Index	Assigned To	Reported By
9.	Replacing placemarks in wrong places	Logic	4	1.0	Thandar	Moe Hein

Time Reported (Iteration No.)	Deadline	Status	Fixed By	Time Fixed (Iteration No.)	Retested By
4	22 Sept	Fixed	Soe Thet	5	Thandar

Bug Tracking



Project Risk and Mitigation

No.	Risk	Likelihood (Before Midterm)	Likelihood (Midterm)	Impact on Project (Before Midterm)	Impact on Project (Midterm)
1.	**Schedule Risk** Underestimation of the time taken for a task	**Medium**	**Low**	**High**	**High**
2.	**Technical Risk** Unfamiliarity with twitter and Germanium APIs	**Medium**	**Low**	**Medium**	**Medium**
3.	**Technical Risk** Integration difficulties with Germanium and twitter (Placemarks)	**Medium**	**Low**	**High**	**Low**

Project Risk and Mitigation

No.	Risk	Likelihood (Before Midterm)	Likelihood (Midterm)	Impact on Project (Before Midterm)	Impact on Project (Midterm)
4.	Technical Risk Twitter server downtime	Low	High	Medium	High
5.	Technical Risk API changes	Low	Low	High	High

Project Risk and Mitigation

Mitigation Plans

No.	Risk	Mitigation Plan
1.	**Schedule Risk**	- Burn Midnight oil - Get Help from the rest of the team members
2.	**Technical Risk**	-Share information and technical skills with each others -Brainstorm together as a team -Get help from twitter and Germanium developers community
3.	**Performance Risk**	-Share information and technical skills with each others -Brainstorm together as a team -Get help from twitter and Germanium developers community -Has developed the application in a way that even the twitter server is down, the site will be running only showing 3D Models

UAT 1 Plan

Method – User Observation and feedback

Sample Size – 21 users (incl. 14 twitter users)

Period – 24 Sep and 25 Sep

Venue – SMU

Estimated Duration – 30 to 40 minutes

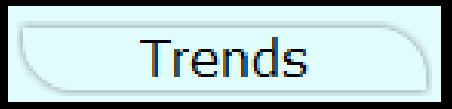
Requirement – PC with Germanium installed

UAT 1 Results

- “very messy on 3D model because of the tweets and the names appear on the tweets”
- “quite messy with text on the building”
- “so many white space”

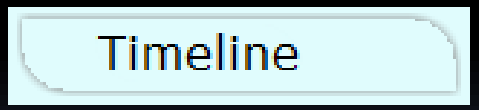
UAT 1 Results

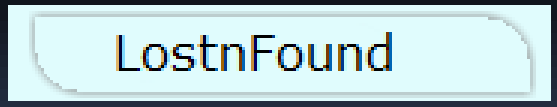
Features



- Around 80% think that Trends feature is noticeable

- But, “no animation while cursor is on the buttons”



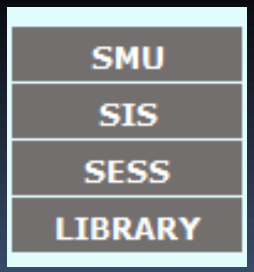


UAT 1 Results

3D Model

- 77% of the surveyors recognize SMU buildings in 3D Model

- Around 80% of them finds the eye control and Side Navigation of the 3D Models easy to use



UAT 1 Results

However,

- Around 50% don’t like the size of profile picture and username appearing on 3D Model

- “put in more differentiation factors of each building”

- “display the building on the larger scale”

UAT 1 Results

Timeline and Trends

- 70% doesn't notice the difference between trend tweets and timeline tweets in timeline

- Around 35%, browsing back and forth between timeline and trend is not smooth

UAT 1 Results

LostnFound

- For 80% of participants , searching attributes used in timeframe filter are acceptable

- “it would be nice if the auto refresh process is more noticeable”

UAT 1 Results

Overall

- Over 55% of participants, like displaying tweets in 3D models the most
- But, 30% suggest 3D model still needs improvements, followed by trends feature
  - “it appears that the script is busy and cannot browse in short while”
  - “Need to make the application smoother and less lag if it is for public to use”

Things we learned

Developing Application

- Designing 3D buildings
  - Z-axis
  - Floor plan
- System Design with 3D model
  - Reloading 3D model deletes all placemarks
  - Complex & frequently refreshing scripts in 3D model are system resource intensive
- API problems

Things we learned

Project Management

- Schedule Management
  - Too optimistic
  - Action → Pessimistic approach

- Trade off between Productivity and Experiences
  - Action → consider team objectives

Q & A

Questions and Advices