

WP7:

Social Chat Game

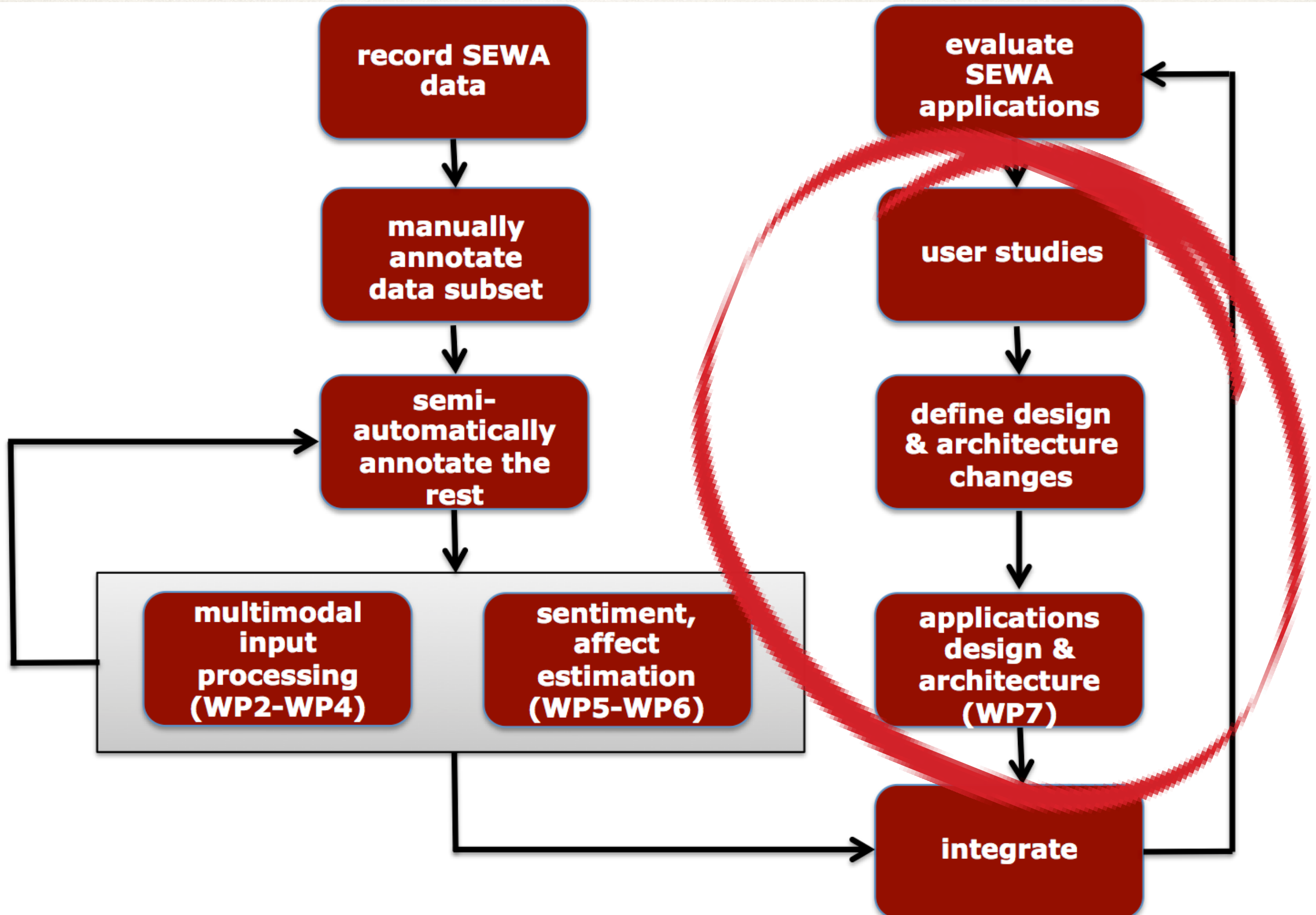
Kam Star CEO
PlayGen



Automatic Sentiment Analysis in the Wild

PlayGen :: Applied Games Developers

- ❖ SME founded in 2001 in London, around 20 staff
- ❖ Focused on applying games tech outside pure entertainment
- ❖ Delivered applied games and simulations for :
Sense making from Big Data, European Financial System, Enterprise learning, Curing Cancer, Coronary Bypass Surgery, Career choices, Floods in the UK, Teenage pregnancy, Floodplain management, Violence and Extremism, Nanotechnology, Global Health Policy, Alcohol abuse, Investment in Innovation, Historical battles, Money Laundering, Data Security, Environmental concerns, Public Policy Engagement, Battlefield awareness, Location familiarisation, Climate Change, Generating new ideas, Social Creativity, Designing Games
- ❖ Participant in FP7 and H2020 project including:
RAGE, Symphony, ProsocialLearn, GALA, COLLAGE, CELAR, CACTOS, Fi-Adopt, SeeingNano
- ❖ Commercial Clients include :
Unilever, General Electric, NHS, MoD, HSBC, Wellcome Trust, Fiat, UK Police Forces



Chat Social
Game 1st Ver.

Chat Social Game
2nd ver. (integrated)

Chat Social Game.
3rd ver

Milestones							M1				M2								M3						M4
Month	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39	42				
WP1		Data acquisition and annotation					SEWA DB design and release																		
WP2	Development of robust and cross-language audio-visual features																								
WP3	Development of behavioural feature extraction (body language, FAU, vocalisations, etc.)																								
WP4							Development of continuous-valued audio-visual sentiment models																		
WP5							Development of behaviour similarity measures																		
WP6							Development of mimicry, rapport, recognition																		
WP7	Iterative requirements engineering and application development																								
WP8	Dissemination and communication activities; ethical review																								
WP9	Coordination and management																								

Tasks

- ❖ Task 7.2 : SEWA Chat Social Game
- ❖ Task 7.3 : User Group and User Studies
- ❖ Task 7.4 : Testing and Support
- ❖ Task 7.5 : Evaluation
- ❖ Delivered D7.1 (M12) User Requirements Document
- ❖ D7.3 (M18) Initial version of Chat Social Game (V1)
- ❖ D7.5 (M30) Second version of Chat Social Game (V2)
- ❖ D7.7 (M40) Final version of Chat Social Game
- ❖ D7.8 (M42) Report on Performance Evaluation, Usage, Usability

Results to M12

- ❖ Applications' target users, rationale, needs and corresponding functionalities researched, developed and evaluated. -> Refinement of DoA application domain.
- ❖ Wide range of designs developed in collaboration with end users.
- ❖ Games designs tested in the lab and in focus groups.
- ❖ Prototype Sumobate at <http://sumobate.com> developed.
- ❖ Feedback and insight from Valorization board taken onboard.

Developments on DoA

Area	Description in DoW	Proposed development
Objective of social game	Enjoyment	Develop communication skills <i>Exploration of Enjoyment</i>
User test group	Users of _connectme	Students 18+ (_connectme platform discontinued by UK Govt.)
User interface	Enables visualisation of social network	Enables visualisation of social network. Incorporates social game mechanics to drive frequency of engagement with the game and increase learning e.g. reputation, feedback
Automatic estimation of sentiment, rapport and empathy	Used to develop clusters of liked people	Used to suggest more appropriate partners and detailed feedback.
Feedback	Users receive simple binary feedback on sentiment: another user is either 'liked' or not on the basis of observed behaviours	Users receive more detailed feedback that is immediately useful. This includes stated feedback from the other person as well as feedback on observed levels of tracked features, during and after the interaction.

Focus on communication skills training

Existing human-computer interactions that could be enhanced

- Engagement with entertainment content
- **Engagement with education content**
- Engagement with advertising content

Existing computer-mediated face-to-face activities that could be enhanced

- Customer support and call centres
- Sales
- Emotional support (e.g. Counselling)
- **Job interviews**
- Management discussions in virtual teams
- Business relationships

Face-to-face interactions that could be moved online

- Market research
- **Training to improve communication skills**
- **Training in effective interview skills**
- Speed-dating (business or personal)
- Monitoring of health conditions
- Security checks

Objective: Improve communication skills by getting personalised feedback on short interactions with others

User Group: Final year students and recent graduates. Aged 18+

Rationale :

- ✓ Valuable to users (even in basic mode)
- ✓ High potential for user testing
- ✓ Target group use videochat/social games
- ✓ High potential social and business impact

League of Persuasions (concept)

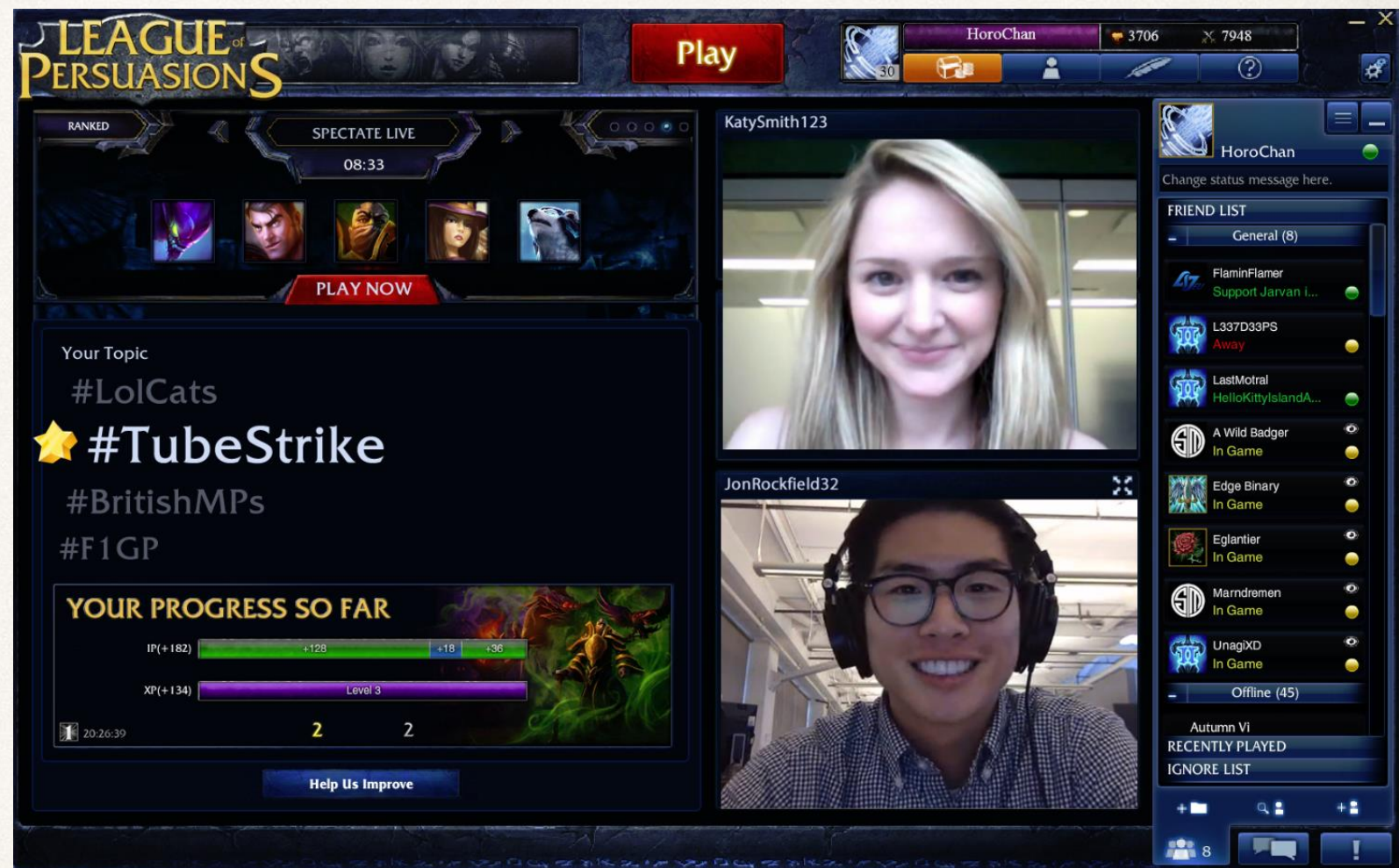
Players come together to debate trending topics on twitter.

SEWA technology used to provide scoring and support in improving debating.

Players progress in the game by completing debates against other players thus leveling up their fantasy character.

Features

- Debating trending topics from Twitter
- Fantasy game setting
- Character development (shareable content)



SpyParty (concept)

Players are immersed in the world of espionage, where they are tasked to track down the Spy. The spy must gather as much intelligence as possible by conversing with other players. However the other players must try to catch out the spy based on their behaviour.

Features

- Asymmetric gameplay, spy vs non-spy.
- Trending twitter topics to initiate conversation
- Time based game mechanics, intelligence gathering, rounds and experience bonuses.
- Penalties, making wrong accusations.



Ravatar (concept)

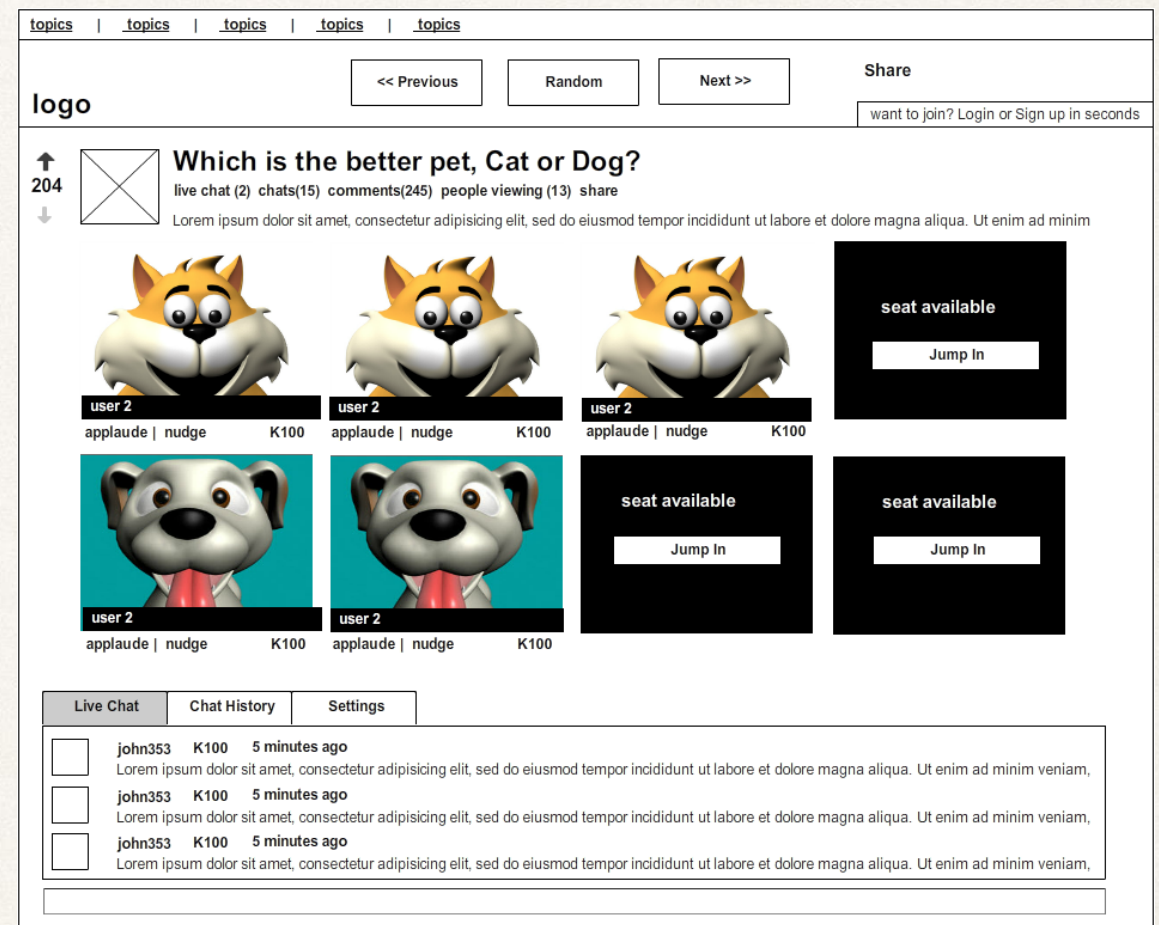
A debating layer on popular topic site Reddit.

Players debate and discuss topics in groups of up-to 8.

SEWA analysis provides cues in supporting player to enhance their debating skills.

Features

- Uses popular topics discussed on the web.
- Avatar representation, player webcam feed is masked by an avatar mimicking their facial expressions.
- Shareable debate content.



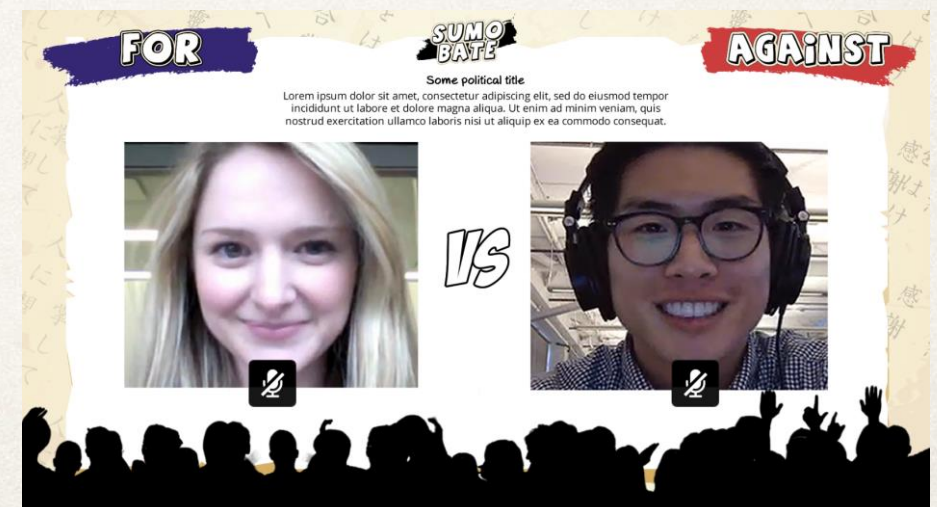
Sumobate (prototype at <http://sumobate.com>)

Debating platform where two players discuss a hard hitting topic such as austerity, immigration, doctors strike etc.

Players use feedback provided by the other player to learn from.

Features

- Uses popular topics discussed on the web.
- Simplified down version of debating.
- Player feedback system.

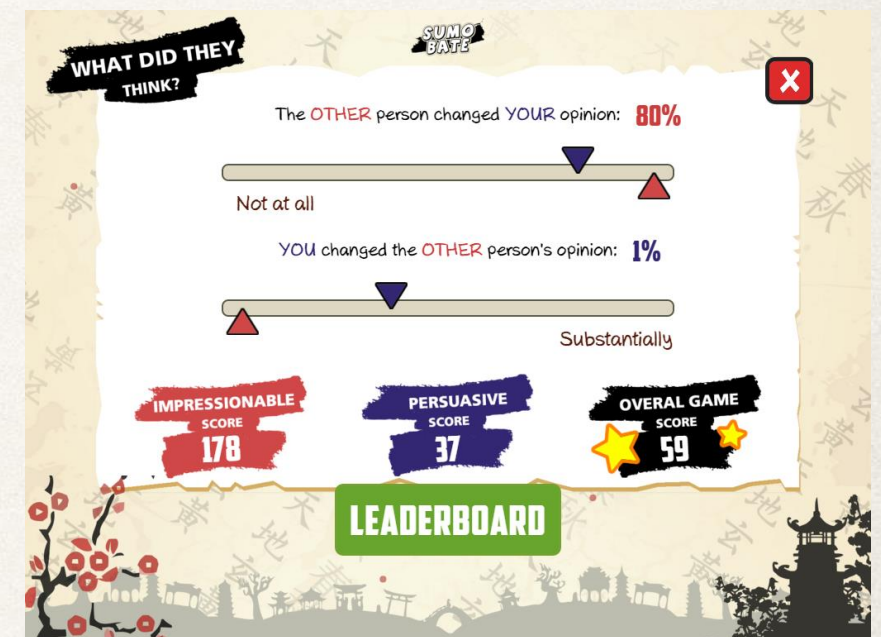


Sumobate Prototype

- Integrate video chat libraries.
- Observe and test optimal user journey for a chat game.
- Measure utility of the player to player feedback.

Outcomes (What we found out)

- Asymmetric role based gameplay is interesting.
- Conversation measurement/progression is required.
- Feedback on emotional responses to help players develop strategies to dealing with certain emotions.
- Secret objectives, bonuses for players to achieve while engaged in conversation with another player.
- Player to player end feedback is more valued.
- User journey should be short, less screens is better.



Current Period to M30

- ❖ Development and evaluation of V1 of the Social Chat Game. (T7.2 and T7.5) Delivery of D7.3 V1. (M18)
 - ❖ Engineering a rapid development framework with integrated audio/video stream & Unity game engine (WebGL)
 - ❖ Development of Interview Skills Trainer Game : #interviewSkillz
 - ❖ Skill to Feature mapping
 - ❖ Content Development (Roles, Questions, Feedback)
- ❖ Post M18 - V1 Evaluation and refinement of V1 with commercial and academic partners. City Univ. QM Univ. ICL, Randstad, SPL

#interviewSkillz

Show me your creativity



Question 3 of 3



INTERVIEWER

You are the interviewer! They are applying to be a...

Chef!

RATE THE OTHER PLAYER

How positive does the candidate appear?

Very negative ★ ★ ★ ★ ★ Very positive



Current Period to M30

- ✦ Further prototype games with integrated audio/video analysis.
- ✦ Market testing alternative games.
- ✦ Feature to Game Mapping for : Likability, Mimicry, Conflict, Interest, Happiness, Sincerity, Calmness, Dominance, Stress, Anger
- ✦ Development of v2 of the Social Chat Game with integrated analysis. D7.5 (M30)