



lerend netwerk: Luca

Meeting 25/04/2022 Luca Gent

topics

1. Polymath lab (?)
2. BabelAR
3. TrustVR
4. PWO ondersteuning

@Valery zouden we polymath vermelden?

Polymath:

- Kasper & Wouter
- onderzoekslabo en community: brug technologie - creativiteit

Doel: hoe future creatives empoweren in functie van opkomende technologien

BABELAR

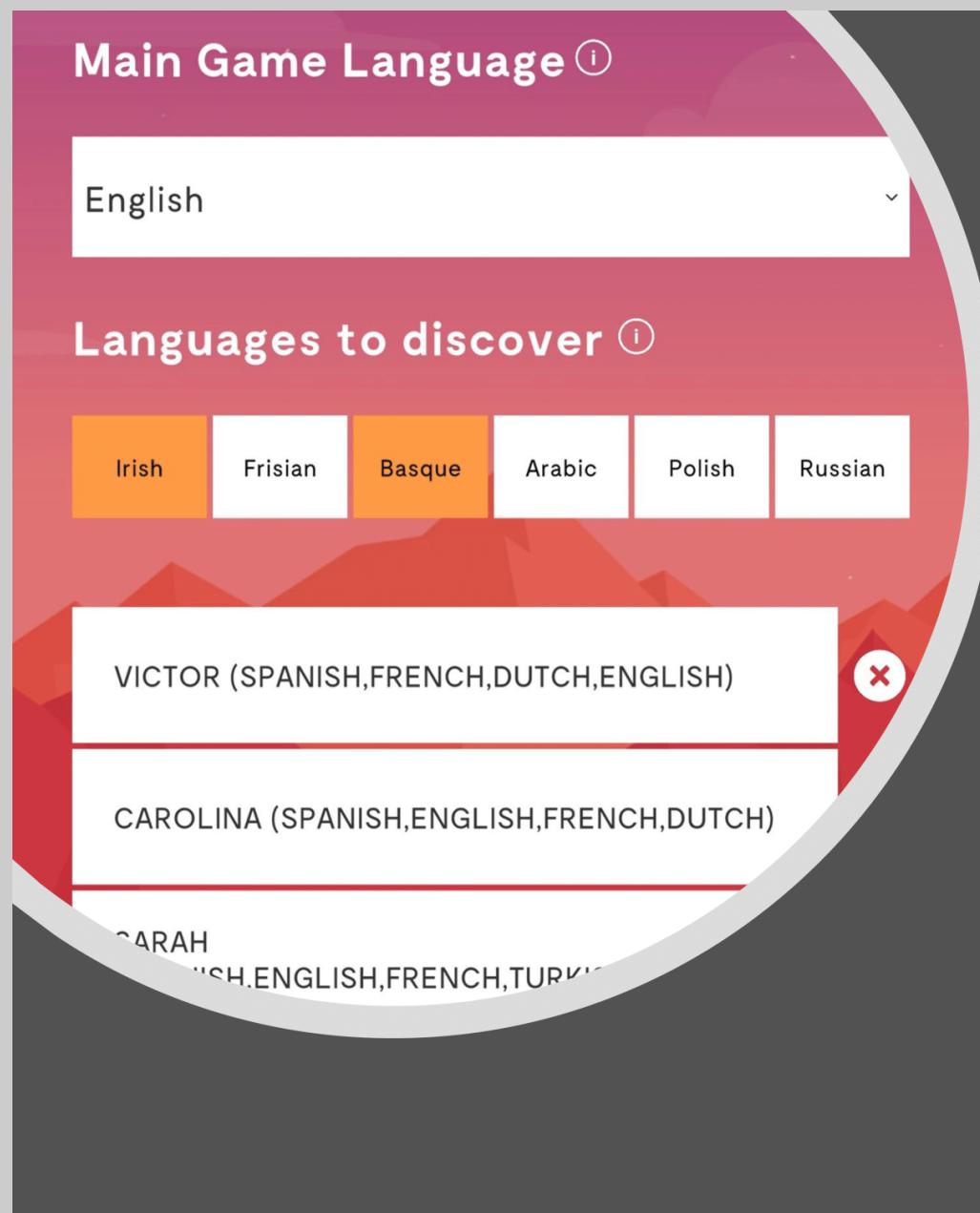




BabelAR

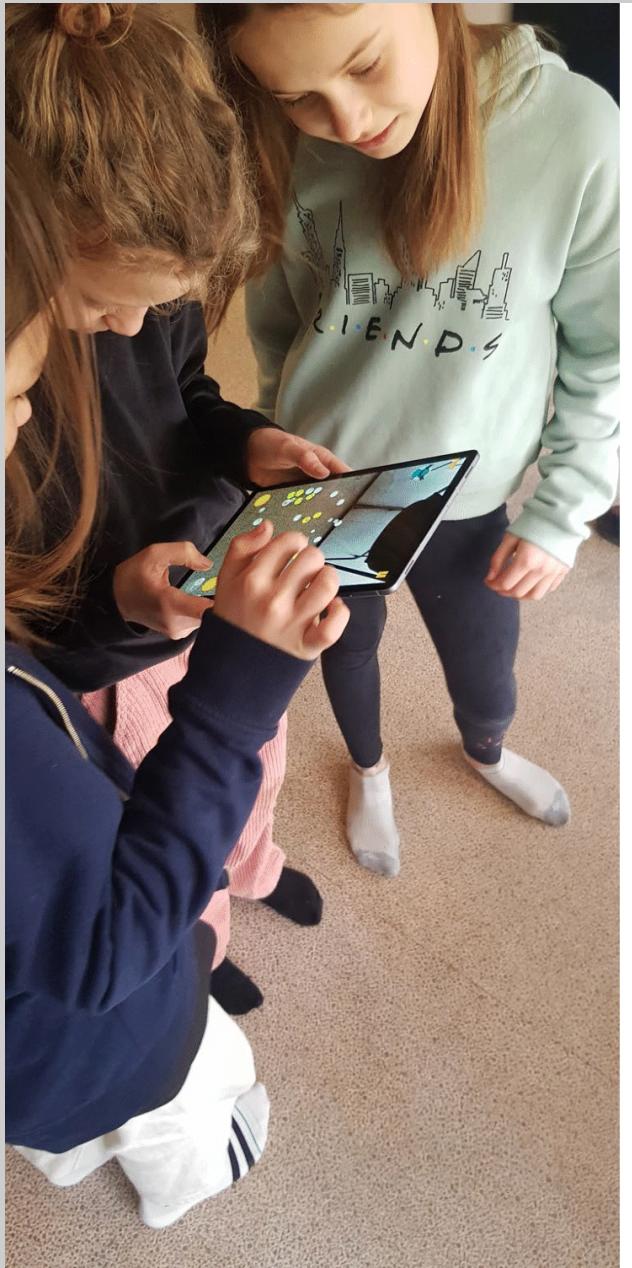
- Erasmus+ project 'virtual language app'
- een meertalige, multi-player Augmented Reality game.
- Henry van de Velde Awards





GOALS GAME

- Create positive multilingual awareness for teachers in primary schools
- Play with multilingualism in classrooms can be fun & augment brain plasticity
- Augment self-confidence pupils about languages



virtulapp

LUCA
SCHOOL
OF
ARTS

ADD PLAYER

What is your player name?

Enter Player Name...

What languages do you speak?

English	Irish	Dutch	Frisian	French	Spanish	Basque
Turkish	Arabic	Polish	Russian			

SPECS GAME

- 15 languages
- 7 - 12 years (with difficulty levels)
- Collaborative – multiplayer(2-6p)
- More languages possible!
- Android & iOS (Preferred on Tablet)
- Where's Waldo?! in Augmented Reality
- Text to speech



BabelAR film



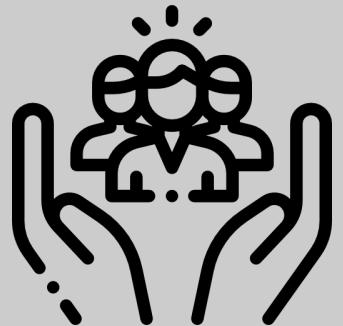
Rol van Luca

- idee - concept - realisatie
- visual first aanpak:
 - interactieve AR omgeving
 - game-ontwikkeling ism research:
- game: groot bereik
 - meer feedback
 - impact & gekendheid

TrustVR

- samenwerking KULeuven
Psychologie en Luca
- hechtingsproblematiek bij
kinderen (9-12)
 - invloed van Oxytocine op
hechting?





doel

immersieve opstelling :

- VR-omgeving
- data-captatie:
 - EEG, GSR, eye-tracking,
questionnaires
- rollenspel: Cyberball

Rol van luca

- ontwikkeling spelomgeving + integratie sensoren
- user story uitschrijven in functie van onderzoek KUL
- samen kijken met KUL voor meerwaarde dmv Virtual Reality
 - game development
 - 3D modelling voor de 'suspension of disbelief'
 - design process

PWO ondersteuning

- domein- + technische experts
- bv Narafi

```
for x in range(2):
    x_tensor = tf.convert_to_tensor(latent_vector, dtype=tf.float32)

    with tf.GradientTape() as t:
        t.watch(x_tensor)
        output = model(x_tensor)

    gradients = tf.gradients(output, x_tensor)

#with tf.Session() as sess:
sess.run(tf.global_variables_initializer())
result_output=np.array(sess.run(gradients)).reshape(18,512)

latent_vector += result_output
print(np.mean(model.predict(latent_vector)))
img = generate_image(latent_vector)
display(img.resize((512,512),PIL.Image.LANCZOS))

predictions = model.predict(latent_vector).reshape(-1)
print(predictions)

img = generate_image(latent_vector)
display(img.resize((512,512),PIL.Image.LANCZOS))
img.save("generated_images/LB_0001_01.png", "PNG")
```

