



Introducing Reverie:

**VR as an accessible therapeutic
technology for people with dementia**

East of England Technology In Care Summit
19th March, 2025

Mark Tattum-Smith
Project Lead for Reverie
Suffolk County Council



Hello ...

**Digital Practice Lead (Waveney)
Suffolk County Council**

- Worked within Adult Social Care in Waveney for 16 years
- Registered Social Worker
- Part of the Cassius Digital Care Team.
- Project Lead for Reverie VR



Clinical Research Findings



Improvement in Memory,
Attention & Cognition



Reduction in Agitation &
Challenging Behaviours



Significant Enhancement
in Mood & Wellbeing

Despite these significant findings, the number of care settings that are making regular or even occasional use of VR are very limited indeed.

Project Timeline 2021 - 2023



Digital Care Team were awarded moneys from Suffolk 2020 Fund to explore how we could make Suffolk-based Virtual Reality experiences available across all care settings.

End of

2020

During
2021

Conducted extensive market and stakeholder engagement and obtained specialist legal advice to proceed with an ambitious procurement.

Developed and defined our Specification and went out to tender.

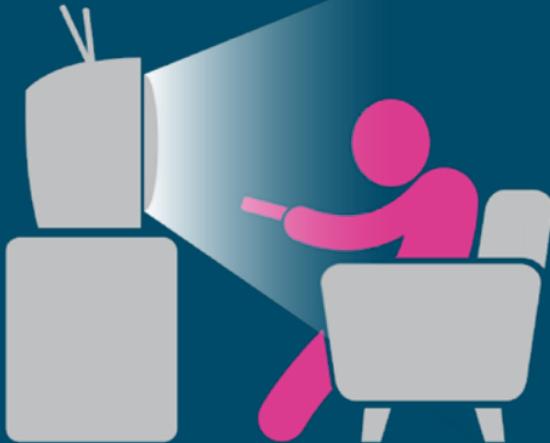
2022

SPARK

October
2022

Suffolk County Council awarded an £80k contract to Spark Emerging Technologies Ltd to develop a commercially available bespoke VR app which will deliver VR experiences to people living with dementia by pairing a VR headset to a tablet to enable safe, carer-driven therapeutic experiences.

Healthwatch Suffolk's Dementia Report 2023



"She'd just be watching telly all day, sitting in her chair."

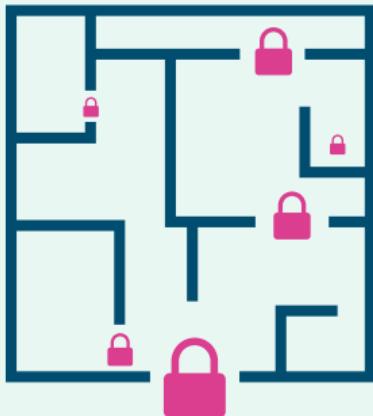
Stimulating and engaging activities were seen as important for people's wellbeing, but this was missing from the experience of some people with dementia living within local residential care or nursing homes.

Lack of stimulation

"She was not engaging, she didn't come out of her room, she'd just given up and their attitude was, 'Oh, well, she doesn't want to come out of her room we'll leave her in there'. And that's not in someone with dementia's best interest....Just because they don't want to come out, there are ways. You take the mountain to Mohammed, don't you? You go in to them, you chat with them." **(Carer, Interview)**

Problem 1) Cognitive Stimulation

Healthwatch Suffolk's Dementia Report 2023



Confinement

"She was completely locked up with no access to outside and she could only get through the doors to the living area or back to her room if they allowed her, everything was keypad..."

"[It was like a] part time prison, it was horrible, I hated it."

(Carer, Interview)

Problem 2) Autonomy & Freedom

'They were singing Old MacDonald had a Farm.'

"My dad did go somewhere twice. I remember the second time I picked him up and they were singing, Old MacDonald Had a Farm.... He got back in the car and went, 'I am not going back there again'. Fine. That was it." **(Carer, Interview)**

Problem 3) Personalisation

"My wife tried the local day centre but stopped after four weeks because she found it boring and the activities childish. The transport was not reliable to get her there." **(Carer, Feedback form)**

A carer's view of VR

“You can't get them to a forest walk every day, you can't get them to a beach every day, you can't get them to a cathedral every day and it's as close to those environments that they can then get to regularly ... so it's... definitely beneficial for them because I mean [the PWD] wouldn't have seen the lovely countryside today if it hadn't of been virtual reality unfortunately ... so it's great. It stimulated him.”

Carer cited in (2021) Rose et. al. “Bringing the outside in: The feasibility of virtual reality with people with dementia in an inpatient psychiatric care setting”. *Dementia*, 20 (1), pp. 106-129



A summary of the contract

- The VR app will link a laptop with a VR headset to enable carer-driven, supported VR experiences.
- This means that the carer will be able to pause or stop the film if the user is becoming bored or in anyway distressed.
- No dependency on Wi-Fi.
- Once the build of the app and testing is complete, the app will be openly commercialised with Spark.
- ROI - SCC have secured a significant discount on the cost of set-up and subscription which it will make available to all accredited care settings in Suffolk.
- Spark will supply hardware and provide ongoing software support.
- App will enable personalised VR experiences tailoured to individual interest and likes.

Synergy VR Co-production Group



→ Join Synergy VR
Co-production Group.

**Virtual Reality for people
living with dementia.**

In February '23 we launched our Synergy VR Co-production Group that is made up of people living with dementia, family carers as well as a range of health and social care professionals.

We are also working with staff and residents at a Care UK residential and nursing home in Suffolk.

Clinical health leads have approved our safety protocols.



Synergy Workshop 1: March 2023





Feedback from People with Dementia in Suffolk Experiencing Virtual Reality

"It's amazing!
I can't believe it.
It's not scary...
it's exciting!"

"It's pretty
strange to be
somewhere else.
It's cool."

"I like the
music."

"It's fantastic.
It's... resplendent.
I feel... excited."

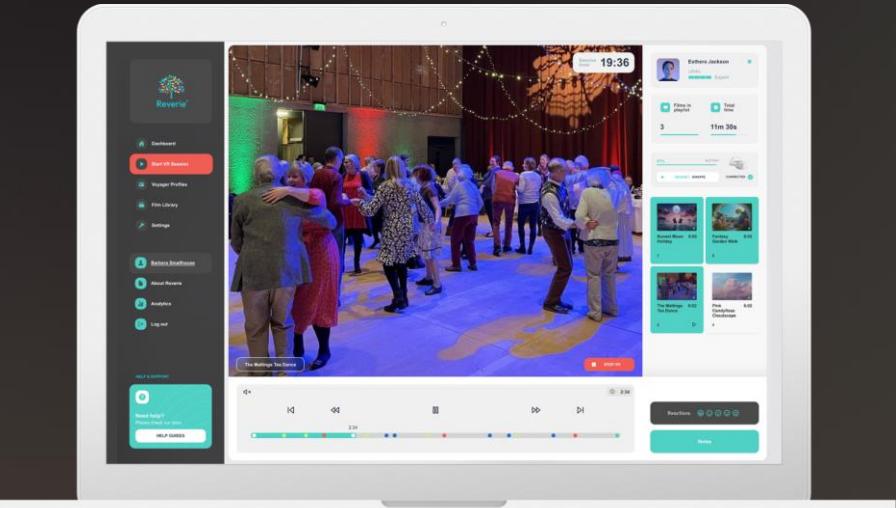


"It's so beautiful!
You don't expect
to see this."

"It's bloody
marvellous!"

"It's a good
experience."

"His
communication
was better while
it was on, I was
impressed"



Development: 2023 - 2024

2023

- # Co-production over Reverie Lobby & Branding
- # Commencement of film capture – Southwold / Bury St Edmunds / Cycle ride from Thorpeness / Snape Maltings / Flatford Mill / Colchester Zoo
- # Back-end work on the app to enable system to be Wi-Fi free;
- # Planning of UI structure of the app;

2024

- # Cyberessentials certification & DPIA sign-off
- # External Website Build
- # Co-production of Front-end development of app
- # Hardware confirmation
- # Trial in Care UK Care Home & Day Centre
- # Collateral Resources
- # Sign-off by SCC



How to get Reverie:

- 1/ Hardware – one-off cost
- 2/ Software – Monthly or annual payment for license



Angel Kozlev
Manager

 OVERVIEW HOST PROFILES VOYAGER PRO

Angel Kozlev
Carehome Manager

Profile Information

ORGANISATION
Spark Cares

EMPLOYED
03/07/2020

Full Name: Angel Kozlev

Email: ak@spark-lab.co.uk

Edit details 

Host profile

Voyager access

VOYAGERS	LEVEL	TIME IN VR	PROFILE ACCESS	PROFILE
 Darrel Buckridge	BEGINNER 	1hr 20m	<input checked="" type="checkbox"/>	
 Adrienne Goodwin	EXPERIENCED 	1hr 20m	<input checked="" type="checkbox"/>	
 Marcella Hilpert	BEGINNER 	1hr 20m	<input checked="" type="checkbox"/>	
 Brandon Weimann	BEGINNER 	1hr 20m	<input checked="" type="checkbox"/>	



Look through our VR session film library

Browse all the potential destinations

FILM LIBRARY

Reverie dashboard

Start Here

Start a VR session or review voyager profiles.

Start VR Session



Voyager Profiles



Begin setup →

START

Profiles →

VIEW ALL

35

4h 31m 1s

65.61%



Reactions

Past 8 days:



● Positive reactions
● Negative reactions

ANALYTICS

Dashboard

Start VR Session

Film Library

Settings

Angel Kozlev

About Reverie

Analytics

Log out

Quit Reverie



Start VR Session
Select voyager

Profiles

VOYAGERS	LEVEL	TIME SPENT IN VR	DISLIKES	HEARING-AID	GLASSES	GLASSES SPACER	IPD	ADVERSE REACTIONS	SELECT
Darrel Oliver Buckridge	Beginner 	an hour	Dogs Sausages Cats Elephants	No	No	No		No	<input checked="" type="checkbox"/>
Adrienne Mirabel Goodwin	Beginner 	an hour	Red	No	No	No	Yes	Yes	<input checked="" type="checkbox"/>
Marcella Harper Hilpert	Learning 	3 hours	None	No	No	No		No	<input checked="" type="checkbox"/>
Brandon Julian Weimann	Learning 	2 hours	None	No	No	No		No	<input checked="" type="checkbox"/>
Lillian Brielle Hartmann	Learning 	5 hours	None	No	No	No		No	<input checked="" type="checkbox"/>
Forrest Macejkovic	Beginner 	24 minutes	None	No	No	No		No	<input checked="" type="checkbox"/>
Terrance Haag	Beginner 	3 minutes	None	No	No	No		No	<input checked="" type="checkbox"/>
Wilbur Dylan Jacobson	Beginner 	a few seconds	None	No	No	No		No	<input checked="" type="checkbox"/>
Maxine Mueller	New 	None	None	No	No	No	Yes	Yes	<input checked="" type="checkbox"/>
Jesse Gutkowski	New 	None	None	No	No	No		No	<input checked="" type="checkbox"/>
Edwin Josiah Cumerata	New 	None	None	No	No	No		No	<input checked="" type="checkbox"/>
Dana Nixon Feeney	New 	None	None	No	No	No		No	<input checked="" type="checkbox"/>
		New							

Stage 1 Select voyager

Pre
Immersion

Immersion

3% complete

Post
Immersion

Select
voyager

Back

Next



Adrienne Mirabel Goodwin

LEVEL

Beginner



Start VR Session
Voyager profile

Reverie®

Adrienne Mirabel Goodwin
LEVEL
Beginner

SESSIONS: 17
Sessions: 17
Level: Beginner
Total time logged: 5 hours
Session notes: Voyager does not have any notes.
Dislikes:

Create Risk Assessment

Risk assessment
Please answer the following questions to ascertain the suitability of the voyager to use the VR headset

Known to experience hallucinations, visual disturbance or psychosis?

Yes No Unsure

💡 This voyager is not suitable for Reverie as it could exacerbate their symptoms and potentially induce further psychological distress.

💡 Professional opinion override Yes No

Question 2/9

Previous Next

Close

Stage 1 Preparing your voyager
Pre Immersion Immersion Post Immersion
12% complete
Check profile Back Next

0 connected



Start VR Session

Voyager profile



Adrienne Mirabel Goodwin

Sessions: 17



Level



Total time logged

Session notes

Dislikes

Voyager does not have any notes.

Beginner

5 hours

SEX	AGE	IPD	HEARING AID	Glasses	RISK ASSESSMENT CREATED	LAST UPDATED
Female	52	No	No	No	04/02/25	04/02/25

Risk assessment	Adverse Reactions	Session log
-----------------	-------------------	-------------

SESSION DATE	HOST	FILMS WATCHED	RAG	DURATION	FULLY WATCHED	RATING	REVIEW
11/12/24	Angel Kozlev	2 films	▼	3m 12s	✓	No	
11/12/24	Angel Kozlev	2 films	▼	1m 42s	✓	No	
20/12/24	Angel Kozlev	0 films	▼	Incomplete	✓	No	
06/01/25	Angel Kozlev	2 films	▼	Incomplete	✓	No	
06/01/25	Angel Kozlev	0 films	▼	Incomplete	✓	No	
06/01/25	Angel Kozlev	1 film	▼	2m 46s	✓	No	
10/01/25	Angel Kozlev	2 films	▼	10m 20s	✓	No	
14/01/25	Angel Kozlev	1 film	▼	3m 4s	✓	No	
14/01/25	Angel Kozlev	1 film	▼	45s	✓	No	
15/01/25	Angel Kozlev	1 film	▼	Incomplete	✓	No	
29/01/25	Angel Kozlev	3 films	▼	7m 13s	✓	No	
29/01/25	Angel Kozlev	4 films	▲	6m 3s	✓	No	
		Watch the world go by from...	●	4m	✓	★★★☆☆	View
		A walk down Southwold Pier	●	4m 44s	✓	★★★☆☆	View
		A walk outside Snape Maltings	●	6m 32s	✓	★★★☆☆	View
		Thorpeness Meare	●	4m	✓	★★★☆☆	View
29/01/25	Angel Kozlev	4 films	▼	11m 1s	✓	No	

Stage 1 Preparing your voyager

Pre Immersion

Check profile

Immersion

12% complete

Post Immersion

Back

Next



Adrienne Mirabel Goodwin

LEVEL

Beginner





Start VR Session
Voyager consent



- Dashboard
- Start VR Session
- Film Library
- Settings

Angel Kozlev

About Reverie

Analytics

Log out

Quit Reverie

0 connected



Obtain consent

Adrienne is able to grant verbal or non-verbal consent

No - Adrienne declines consent - return to dashboard

No - but carer felt it was in the best interest of Adrienne to proceed

Consent

Guide

History

Use the resources above to obtain consent from Adrienne that they are happy to continue

Stage 1 Ask Adrienne if they are happy to use the headset today

Pre Immersion

Obtain consent

Immersion

20% complete

Post Immersion

Back

Next



Adrienne Mirabel Goodwin

LEVEL

Beginner



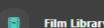
Start VR Session
Feedback



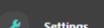
Dashboard



Start VR Session



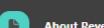
Film Library



Settings



Angel Kozlev



About Reverie



Analytics



Log out



Quit Reverie

0 connected



Feedback



Angry



Unhappy



Neutral



Happy



Excited

Ask Adrienne how they are feeling

Select the emoji above that best suits your voyager's current state of wellbeing

Stage 1 Voyager feedback

Pre
Immersion

Immersion

20% complete

Post
Immersion

Obtain
consent

Back

Next



Start VR Session
Film library



Search the library
35 films.

Type here...

ALL (A-Z)

RAG RATING



Adrienne Mirabel Goodwin

LEVEL

Beginner



Dashboard

Start VR Session

Film Library

Settings

Angel Kozlev

About Reverie

Analytics

Log out

Quit Reverie



A bike ride from Thorpeness to Aldeburgh

Reverie

45 Views

☆☆☆☆☆



A groovy jazz tune at Snape Malting's Christmas Tea Dance

2:44

Reverie

51 Views

☆☆☆☆☆



A short communion service in Edmund Chapel

Reverie

5 Views

☆☆☆☆☆



A walk around Abbey Gardens

Reverie

7 Views

☆☆☆☆☆



A walk down Southwold Pier

Reverie

20 Views

☆☆☆☆☆



A walk outside Snape Maltings

Reverie

4 Views

☆☆☆☆☆



Stage 1 Add films to the voyager playlist

Pre
Immersion

Immersion

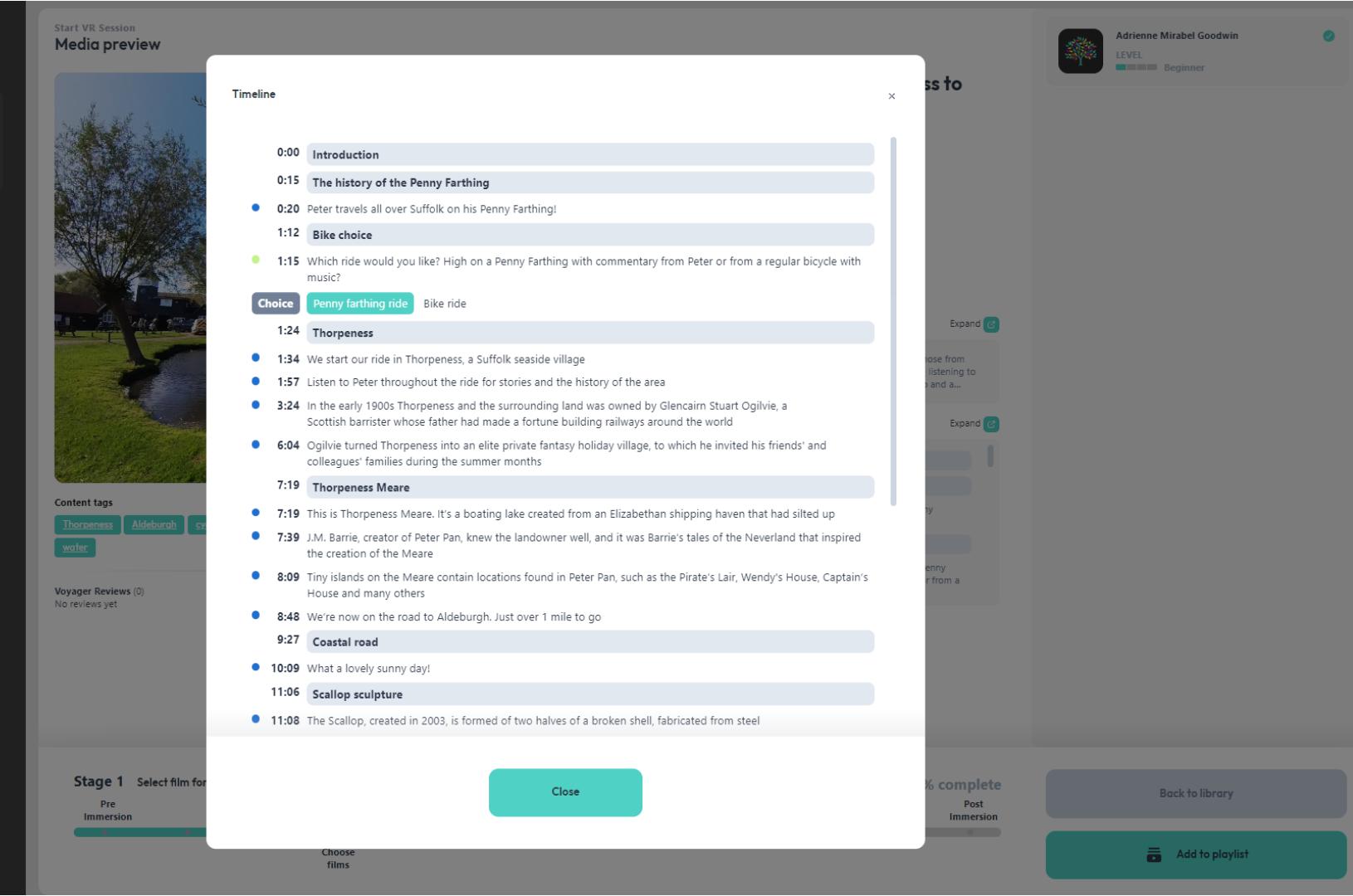
Choose
films

28% complete

Post
Immersion

Back

Next





Start VR Session
Media preview



Dashboard

Start VR Session

Film Library

Settings

Angel Kozlev

About Reverie

Analytics

Log out

Quit Reverie



Content tags

Thorpeness Aldeburgh cycling coast sunshine water

Content warning

Speed motion Water

Voyager Reviews (0)
No reviews yet.

Host Reviews (0)
No reviews yet.

A bike ride from Thorpeness to Aldeburgh



Film rating Views

45

Creator



Duration: 20:00
Download size: 5 GiB
Creator: Reverie
Website: reverievr.co.uk

Summary

Expand

Go on a bike ride from Thorpeness to Aldeburgh. Choose from two views: either high on a Penny Farthing with Pete listening to his live commentary, or from a regular bike with Deb and a...

Timeline

Expand

- 0:00 Introduction
- 0:15 The history of the Penny Farthing
- 0:20 Peter travels all over Suffolk on his Penny Farthing!
- 1:12 Bike choice
- 1:15 Which ride would you like? High on a Penny Farthing with commentary from Peter or from a regular bicycle with music?

Stage 1 Select film for your playlist, or go back to the library to choose another film

Pre Immersion

Immersion

Choose films

28% complete

Post Immersion

Back to library

Add to playlist



Adrienne Mirabel Goodwin

LEVEL

Beginner



Session timer 0:21

END SESSION

Forrest Macejkovic

LEVEL Beginner

Films in playlist

Total time 26m 45s

20% BATTERY

WEARING CONNECTED

HEADSET - BLACK-REINDEER

A walk down Southwold Pier 4:44

A bike ride from Thorpeness to Aldeburgh 20:00

1 2

Angel Kozlev

About Reverie

Analytics

Log out

Quit Reverie

1 connected

The Orangerie lobby

STOP VR

LOBBY

0:00 4:44

Angry Unhappy Neutral Happy Excited

Notes



Reverie®

- Dashboard
- Start VR Session
- Film Library
- Settings
- Angel Kozlev
- About Reverie
- Analytics
- Log out
- Quit Reverie

1 connected



A walk along Southwold Pier

0:18

Talking point

Preview media 4:44

Angry Unhappy Neutral Happy Excited

Notes

Session timer 1:03

END SESSION

Forrest Macejkovic

LEVEL Beginner

Films in playlist Total time

2 26m 45s

20% BATTERY

WEARING MEDIA PLAYBACK

HEADSET - BLACK-REINDEER

A walk down Southwold Pier 4:44 1 20:00 2

A bike ride from Thorpeness to Aldeburgh



Post immersion
Wellbeing check



- Dashboard
- Start VR Session
- Film Library
- Settings

Angel Kozlev

About Reverie

Analytics

Log out

Quit Reverie

1 connected

Stage 3 Post immersion checks

Pre
Immersion



Clear selection



Did you observe any adverse reactions
(e.g. dizziness, motion sickness, headache etc.).

No

Yes

SELECT ADVERSE REACTION ▾

PHYSICAL

- ANGINA / HEART ATTACK
- ATTEMPTED TO STAND DURING EXPERIENCE
- DIZZINESS
- EYE STRAIN
- EYE TWITCHING
- Fainting episode
- FALL IMMEDIATELY AFTER IMMERSION
- FATIGUED
- GRABBED / REMOVED HEADSET
- HEADACHE / MIGRAINE
- IMBALANCE
- NAUSEA (MILD)
- NAUSEA (SEVERE)
- NECK / BACK PAIN
- PALPITATIONS
- SICKNESS, VOMITING
- SKIN REDNESS, IRRITATION
- SORE DRY EYES
- VERTIGO
- OTHER

69% complete

Post
Immersion

Back

Next



Forrest Macejkovic

LEVEL

Beginner

Films in playlist

Total time

2

26m 45s

20%

BATTERY

WEARING

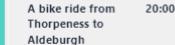
HEADSET - BLACK-REINDEER



A walk down
Southwold Pier

4:44

1



A bike ride from
Thorpeness to
Aldeburgh

2



1 connected

Post immersion
Feedback

Reverie®

- Dashboard
- Start VR Session
- Film Library
- Settings
- Angel Kozlev
- About Reverie
- Analytics
- Log out
- Quit Reverie

Feedback

Angry Unhappy Neutral Happy Excited

Ask Forrest how they are feeling

Select the emoji above that best suits your voyager's current state of wellbeing

VIEW VIDEO GUIDE

Stage 3 Complete voyager wellbeing form

Pre Immersion Immersion Post Immersion

Wellbeing check

69% complete

Forrest Macejkovic

LEVEL Beginner

Films in playlist Total time

2 26m 45s

20% BATTERY

WEARING CONNECTED HEADSET - BLACK-REINDEER

A walk down Southwold Pier 4:44

A bike ride from Thorpeness to Aldeburgh 20:00

1 ▷ 2

Back

Next



Post-immersion
Film review - Voyager



A walk down Southwold... 4:44
Rated 99% ★★★★☆

1



A bike ride from... 20:00
Rated 99% ★★★★☆

2



Submit



Submit

sdbshbdsjh asjbhdsjhd

sadmnbnsamndb mnbsamdb

Edit

Edit



Forrest Macejkovic
LEVEL
Beginner



Films in playlist



Total time

2

26m 45s

19%

BATTERY

WEARING

CONNECTED

HEADSET - BLACK-REINDEER



A walk down
Southwold Pier 4:44

1



A bike ride from
Thorpeness to
Aldeburgh 20:00

2

Back

Next

Stage 3 Complete voyager wellbeing form

Pre
Immersion

Immersion

78% complete

Post
ImmersionReview
films

1 connected

Reverie®

- Dashboard
- Start VR Session
- Film Library
- Settings
- Angel Kozlev
- About Reverie
- Analytics
- Log out
- Quit Reverie

Post-immersion Activities and exercises



A walk down Southwold... 4:44
Rated 99% ★★★★☆

1



A bike ride from... 20:00
Rated 99% ★★★★☆

2



Rated 04/02/25

Activities for A walk down Southwold Pier

Allow the Voyager to choose an ice cream to enjoy, whilst they reflect on their time in VR.

Have a cone of chips ready to eat with the Voyager.

Explore different sea-side songs - Beach Boys, 'Beyond the Sea' ...

Create a sand pit for Voyagers to make their own sand castles

Why not try flying a kite

Do some life story work and find out where the Voyager used to enjoy going to the beach. Where did they go? What was their ideal day at the beach?

If it is a summer's day, why not get some Vitamin D and sit in the sun

Would they like to put their feet in some water

Other common beach games and



Rated 04/02/25

Activities for A bike ride from Thorpeness to Aldeburgh

Allow pedalling! Why not get a floor pedal exerciser and encourage your Voyager to do some exercise?

What kind of pedal bike did the Voyager have? What colour was it? Where did they like to ride?

They passed Thorpeness Meare, did your Voyager used to go sailing, rowing or any water sports?

Could you take your Voyager on a boat trip

Did they use to have a model boat they used to sail when they were a child?

Peter goes past the Aldeburgh Fish and Chips shop, would they like some fish and chips for tea?

Can you arrange for your Voyager to have a Bicycle Rickshaw ride?

Aldeburgh is also famous for Benjamin



Forrest Macejkovic

LEVEL

Beginner

Films in playlist

Total time

2

26m 45s

16%

BATTERY

WEARING

CONNECTED



HEADSET - BLACK-REINDEER



A walk down
Southwold Pier 4:44

1



A bike ride from
Thorpeness to
Aldeburgh 20:00

2

85% complete

Post
Immersion

Activities
and
exercises

Back

Next

Stage 3 Complete voyager wellbeing form

Pre
Immersion

Immersion

Activities
and
exercises



A range of guides have been written and are being uploaded to the app and portal platforms to ensure there is adequate support for the application.

Reverie®

Virtual Reality
- Easy Read Guide

Reverie®

Adverse Reactions Guidance

Support and best practice guidance in the delivery of VR sessions through the Reverie app.

Reverie®

Reverie Best Practice Guidance

Support and best practice guidance in the delivery of VR sessions through the Reverie app.

Reverie®

Infection Control Guidance

Support and best practice guidance in the delivery of VR sessions through the Reverie app.

Reverie®

Risk Assessment & Mental Capacity Guidance

Support and best practice guidance in the delivery of VR sessions through the Reverie app.

Easy Read Guide Produced March 2025

Date of publication: January 2025

Date of publication: January 2025

Date of publication: January 2025 (Version 1.2)

Date of publication: January 2025

Redefining dementia care with immersive VR therapy

A groundbreaking carer driven VR solution improving the quality of life for dementia patients. Reverie enhances cognitive function in a safe, user friendly, and engaging experience.



www.reverievr.co.uk