

Team REX

COSC 4P02

AGENDA

- Introduction
- Development Method
- Sprint Overview
- Tools
- Challenges and Learnings
- Future Development
- Development Team
- Application Demo
- Q&A

Development Team

| Name | Role | Brock ID |
|-----------------------------|-------------------------|----------|
| Parth Bhaveshbhai Patel | Product Owner/Developer | pp19oo |
| Akshar Patel | Product Owner/Developer | ap18zr |
| Naitik Hareshbhai Chovatiya | Scrum Master/Developer | nc18us |
| Aum Pandya | Developer | ap19xt |
| Anishka Shetty | Developer | as18cq |
| Darshakkumar Bambharoliya | Developer | db18hn |
| Sneh Patel | Developer | sp18oo |

Introduction

- Created an AR app with a goal of improving the experience of visiting museums
 - More enjoyable, more educational
- Allows users to use their device to view more information about museum artifacts through pop-up cards along with interactive 3D visuals of artifacts and realistic scenes to enhance the museum experience
- Incorporated an accessibility feature – Text-to-Speech, to allow users to listen to text on app
- Target audience – all visitors
 - Easy to use
 - Provides artifact information directly on user's device



Development Method: Scrum

- Used the Scrum methodology for our app
 - Agile incremental development process
- An iterative approach
 - Flexible
 - Constant development, evaluation, and testing
- Incremental delivery
 - Allowed us to receive feedback and make any needed corrections earlier on and throughout the process as we were able to see working versions of the app often
- For a mid-sized AR project like ours, Agile was the best approach to increase transparency and accountability between team members and customers.
- Scrum is easy to scale
 - Allows team to focus on tasks for each time period
 - Reach goals on a timely basis

Sprint Overview: 6 (2-week) Sprints

Sprint Planning

- During plannings, the product owners and development team reviewed previous work and product backlog
- The product owner created tasks for the next sprint and assigned them to the team

Daily Stand-Up

- Daily 30-minute meeting to discuss progress and any blockers needing assistance



Sprint Overview: 6 (2-week) Sprints

Sprint Demo

- After each sprint, we held a sprint demo meeting to showcase sprint work and receive feedback to improve
 - Attended by whole team
- Regular sprint demos helped us achieve our goals and ensure stakeholder requirements were met

Sprint Retrospective

- Held on last day of the sprint and attended by whole team
- To bring up any issues and monitor the progress during ending sprint to make improvement for upcoming sprint

| | Tools | Main purpose of the tool |
|---|-------------|---|
|  | Notion | To keep track of sprint planning and create the sprint/product backlog |
| | Slack | For daily communication and progress updates |
|  | Google Meet | Used for daily scrum meetings |
| | GitHub | Used for version control, collaboration, and continuous integration and deployment of the project |



Notion

Sprint 1

| | | |
|---|-----------------------------|---|
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| <div><div>▼</div><div><div>Akshar Patel</div><div>4</div><div>...</div><div>+</div></div></div> <div><div>+ New</div></div> | <div><div>+ New</div></div> | <div><div>Progress report 1</div><div>Tutorial - Unity</div><div>Create product/sprint backlog</div><div>Visit museum</div><div>+ New</div></div> |
| <div><div>▼</div><div><div>Aum Pandya</div><div>3</div><div>...</div><div>+</div></div></div> <div><div>+ New</div></div> | <div><div>+ New</div></div> | <div><div>Tutorial - Unity</div><div>Visit museum</div><div>Put avatar in 3d scanned environment</div><div>+ New</div></div> |
| <div><div>▼</div><div><div>Naitik</div><div>4</div><div>...</div><div>+</div></div></div> <div><div>+ New</div></div> | <div><div>+ New</div></div> | <div><div>Progress report 1</div><div>Tutorial - Unity</div><div>Create presentation for meeting</div><div>Visit museum</div><div>+ New</div></div> |
| <div><div>▼</div><div><div>Darshak Bambharoliya</div><div>2</div><div>...</div><div>+</div></div></div> <div><div>+ New</div></div> | <div><div>+ New</div></div> | <div><div>Tutorial - Unity</div><div>Visit museum</div><div>+ New</div></div> |
| <div><div>▼</div><div><div>parth patel</div><div>5</div><div>...</div><div>+</div></div></div> <div><div>+ New</div></div> | <div><div>+ New</div></div> | <div><div>Progress report 1</div><div>Tutorial - Unity</div><div>Create product/sprint backlog</div><div>Visit museum</div><div><div>📄</div>Set animation boundaries and scaling based accessibility settings</div><div>+ New</div></div> |
| <div><div>▼</div><div><div>Sneh Patel</div><div>2</div><div>...</div><div>+</div></div></div> <div><div>+ New</div></div> | <div><div>+ New</div></div> | <div><div>Tutorial - Unity</div><div>Visit museum</div><div>+ New</div></div> |

Identifying our Blockers

High learning curve for SDKs

- Started our project with React Native and Unity
 - Later, we realized that integration of Unity and React Native can be challenging and has a high learning curve
 - Had to change our development platform from React Native to Unity alone

Time management and availability

- Team had different courses and work schedules which made it difficult to find times that worked for everyone
- Sprint tasks were not always met on schedule sometimes, during midterm season for example.
- Lead to things being pushed to next sprints – pile up of work at times

Identifying our Blockers

Delay due to unavailability of resource

- Our AR project required to scan 3D artifacts of the museum
 - Needed to book an appointment with museum manager which was cancelled
 - Delayed our process for one week

Lack of stakeholder engagement and feedback

- Difficult to know if the project was meeting requirements or expectations without feedback from stakeholders
 - May lead to delays in the project's progress

Lessons Learned

- It is important to have **effective communication** with all stakeholders prior to the starting the project
 - Avoid delays in completion of required tasks
- **Manage time** effectively
- **Review project plan often and adjust it** accordingly
 - To avoid any potential blockers in the development process
- To guarantee a quick learning curve for the team, **adequate training and support** should be offered for any new tools or technologies used in the project

NIAGARA ON THE LAKE MUSEUM

START TOUR

DISCOVER MORE 

**FOR THE BEST EXPERIENCE,
MAKE SURE TO ALLOW THE APP
ACCESS TO YOUR DEVICE'S
CAMERA . THESE PERMISSIONS
ARE NECESSARY FOR THE APP TO
OVERLAY DIGITAL INFORMATION
ONTO YOUR SURROUNDINGS.**

**AS WELL AS MAKE SURE THAT
YOUR PHONE IS NOT MUTED :)**

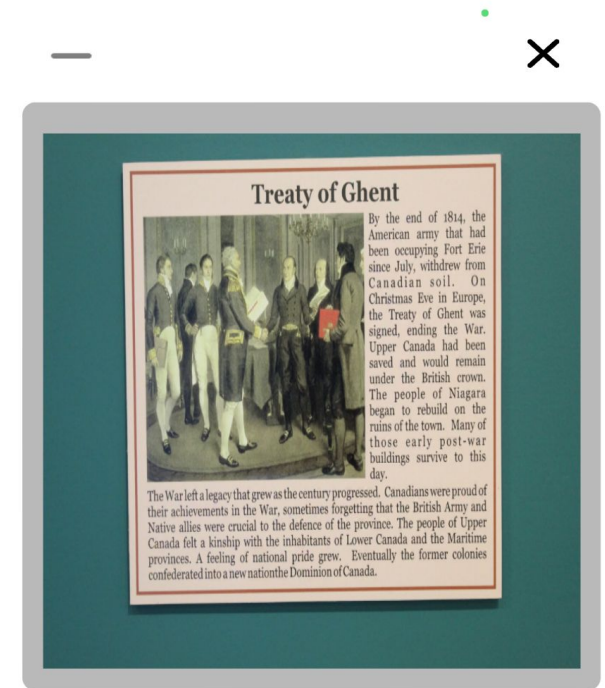
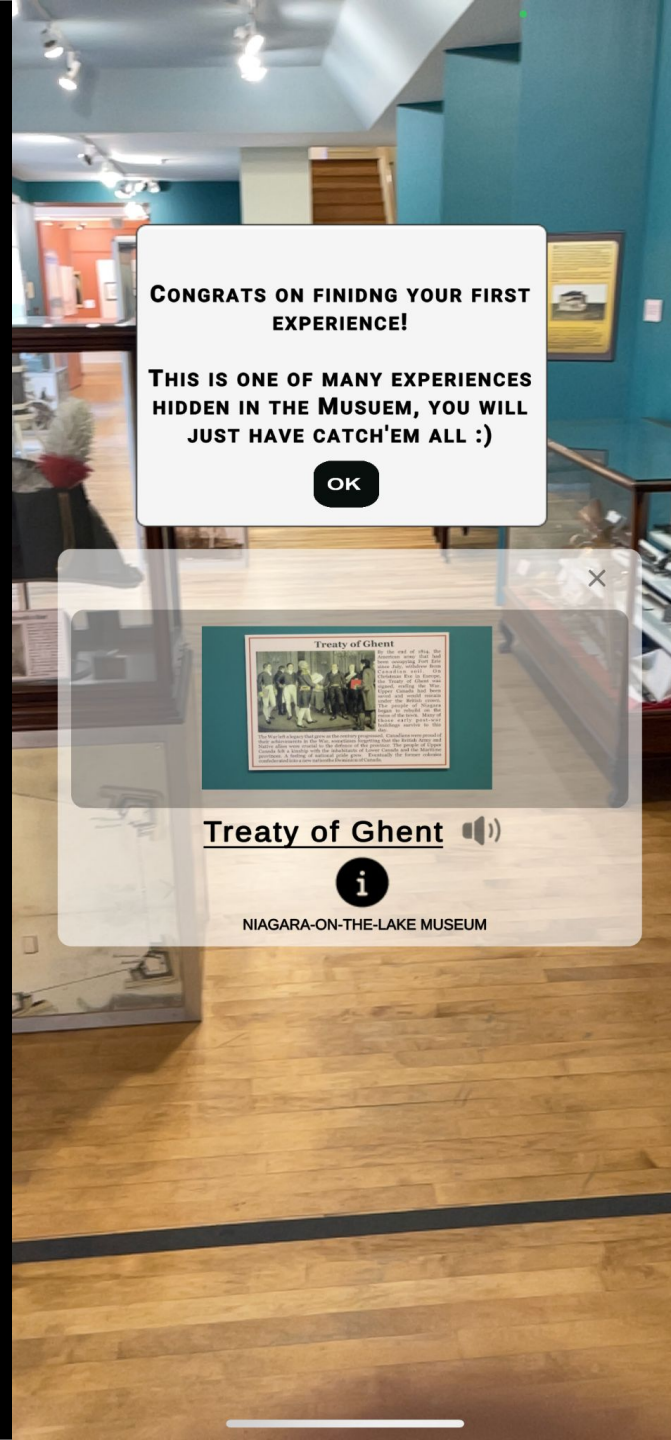
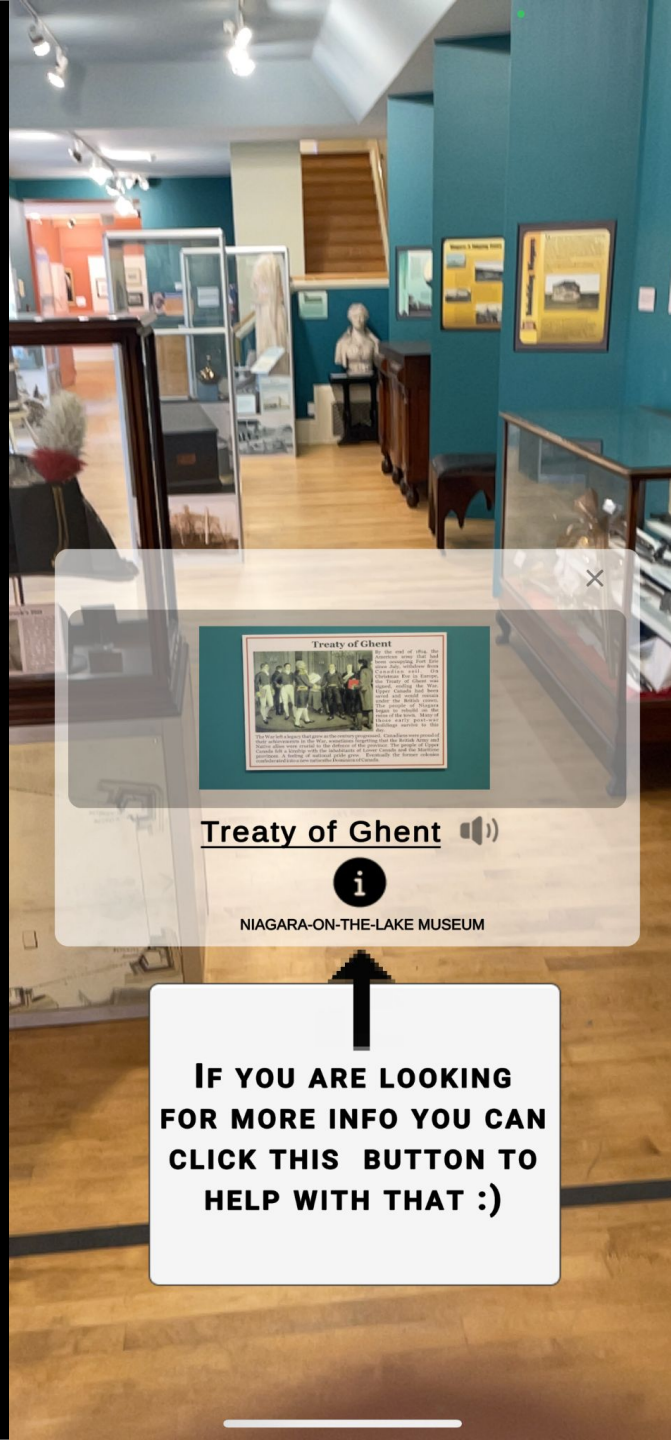
Lets Begin your Experience

**EVERY POSTER AND ARTIFIACT OF THE
1812 EXHIBIT IN THE MUSUEM IS
LINKED TO VIRTUAL CARD THAT
PROVIDES YOU WITH DIFFERENT
EXPERINENCE.**

**SIMPLY GLOSS OVER THEM TO ACTIVATE
A EXPERIENCE!**

**LIKE WE HAVE HERE, WHEN YOU AREADY
PLEASE CLICK THE BUTTON BELOW**





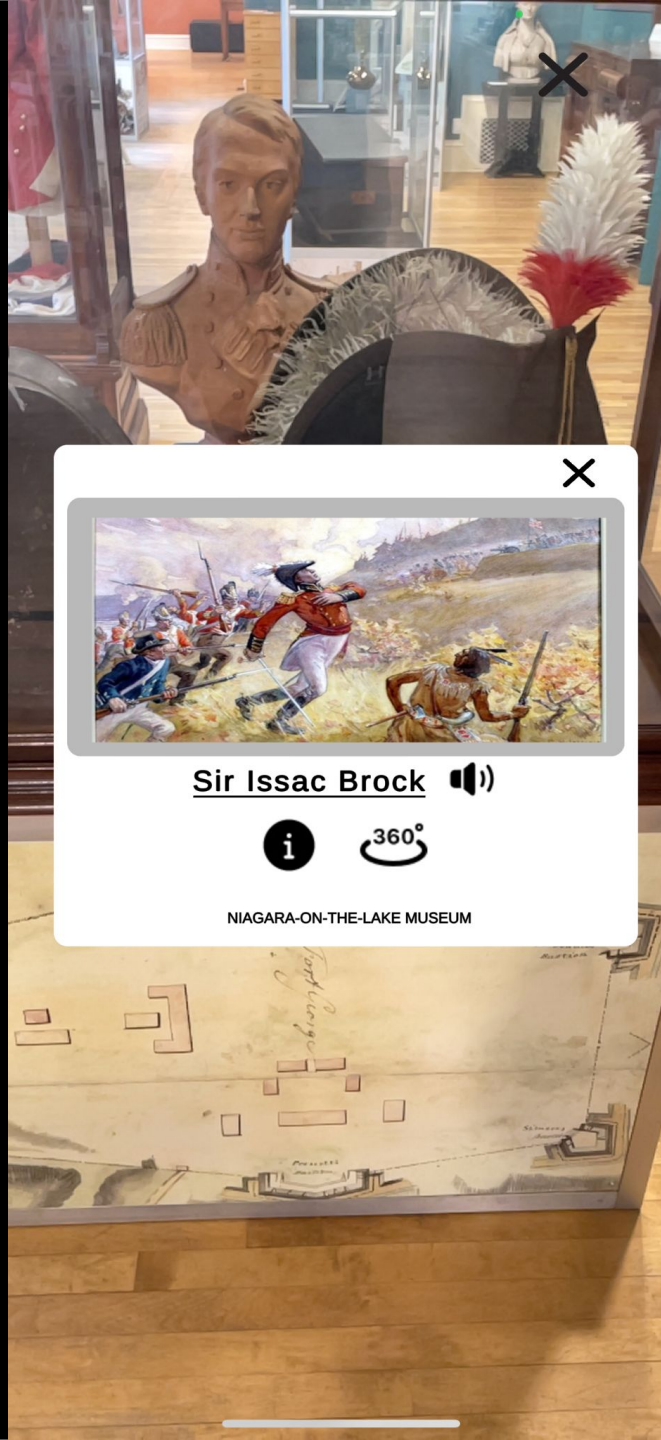
Treaty of Ghent


The Treaty of Ghent was signed on December 24th, 1814 in Ghent, Belgium. The treaty was signed by Great Britain and the United States to end the War of 1812.


Diplomats were eager to sign for peace after a prolonged war due to slow communications regarding peace agreements.



In this peace meeting, Great Britain agreed to give up claims of the Northwest Territory and both Great Britain and the United States pledged to make efforts in ending the slave trade.







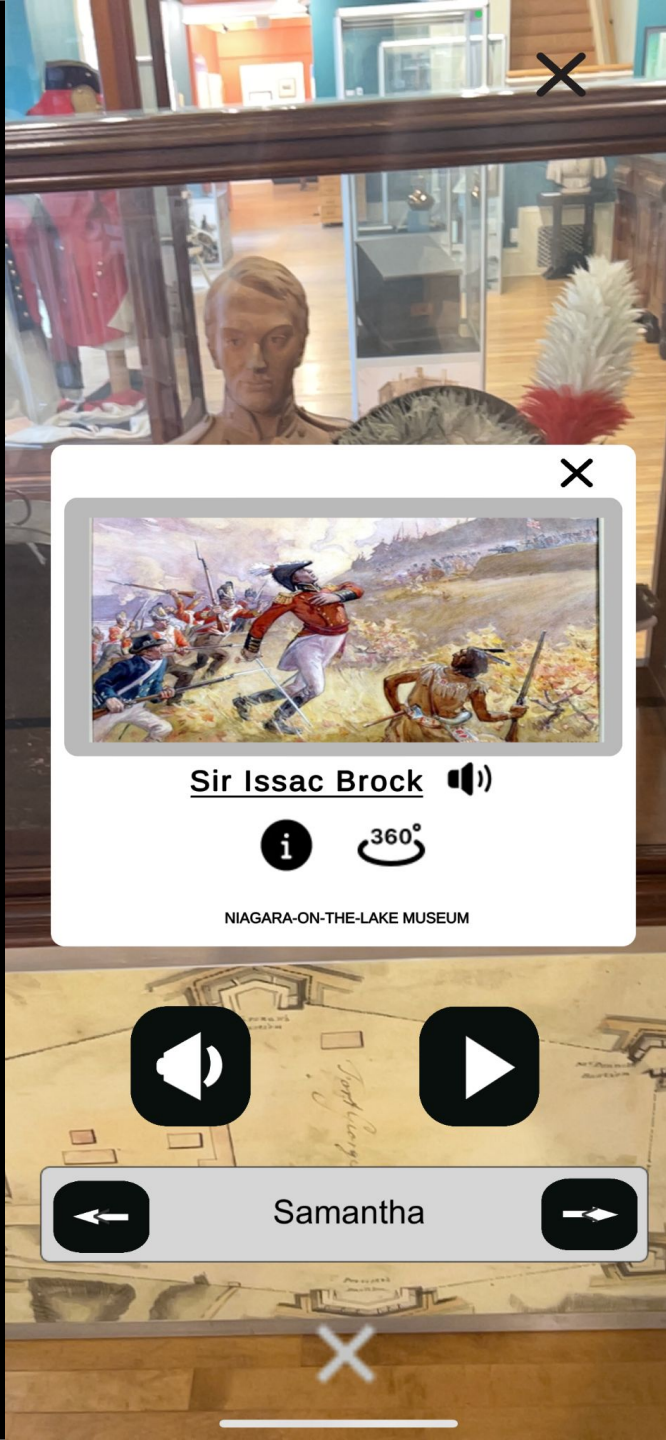
Sir Issac Brock 

NIAGARA-ON-THE-LAKE MUSEUM



NIAGARA-ON-THE-LAKE MUSEUM



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Sir Issac Brock 







NIAGARA-ON-THE-LAKE MUSEUM







Samantha



The slide features two large teal geometric shapes. On the left, a large teal parallelogram extends from the top and bottom edges towards the center. On the right, a teal triangle points upwards from the bottom edge towards the center. The text 'Application Demo' is centered between these two shapes.

Application Demo



Q&A