



# Nurture

A solution for preserving cultural heritage





# Problem Statement

In an increasingly globalized society, it is becoming harder for people to preserve their cultural heritage as they assimilate into new societies. **In Toronto alone, 46% of the population is comprised of immigrants.** Many immigrants groups, and in particular, immigrant student populations, have found it hard to preserve their connections to their cultural roots.

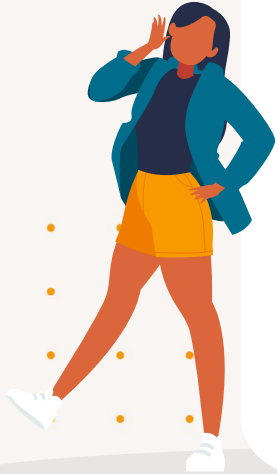
There have been few solutions to address the problem of cultural loss. While apps such as *Indigital Storytelling* have been proposed as potential solutions for preserving culture, they have not gained a significant footprint in addressing this issue.



# Problem vs. Solution

## Problem

How do we help immigrants, and children of immigrants preserve their connections to their cultural roots?



## Solution

Develop an A.I based app that leverages natural language processing to listen, synthesize, and share stories told by its users.



# Target Audience & Geographical Impact

**995,125 South Asian Canadians**

live in Toronto as of 2011.

With 46% of Toronto's population comprised of immigrants, Nuture's target audience will focus on immigrants, refugees, and protected persons in Toronto and the Greater Toronto Area. To gain clarity and quality insights of the logistics of Nuture, we will be primarily focusing on the South Asian population within Toronto & the GTA for the first iteration.



# The Solution



## Tell a Story

Users can share culturally relevant stories to Nuture. Nuture takes the story, synthesizes the contents of the story, and determines if it can add additional information about where and when the story took place, and if any historical data can match the user's timeline of events.

## Explore New Stories

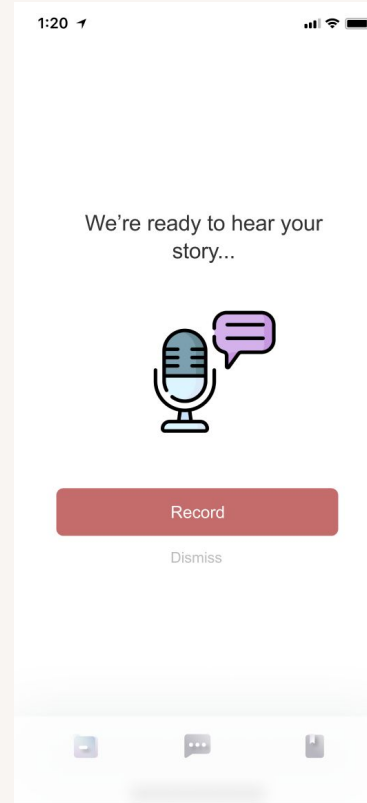
Users can explore the app to find stories, using Nuture's search criterias. Users can search by geographical area, time period, language, and ethnicity.

## Community Engagement

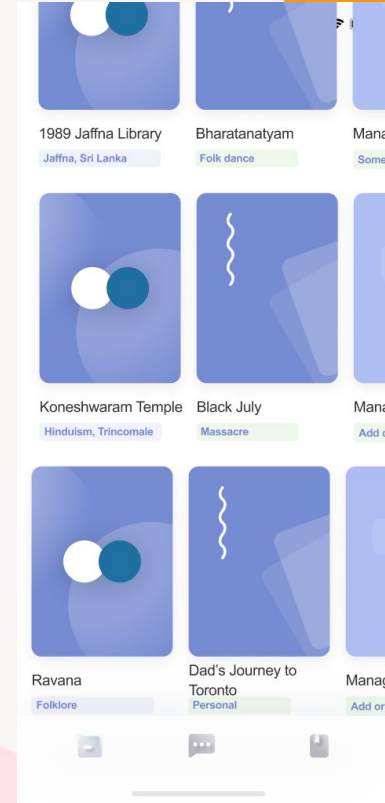
Nuture will also partner up with community organizations and leaders such as public schools, universities, community centres and museums to engage in creating cultural events.

# Low Fidelity Mockups

Nurture will be a mobile app available on Android and iOS platforms. In future iterations, it will be integrated with smart home devices such as Amazon Echo to leverage seamless storytelling recording and playback.



Recording a story



Exploring stories

# Leveraging AWS Technology

## Development

Nurture can use Amazon Amplify for the development of the app.

## Database Storage

Nurture will use Amazon DynamoDB and/or Aurora to store information.

AWS technology that Nurture will leverage.

## Machine Learning

Amazon Transcribe will be the backbone of developing Nurture's storytelling feature.

## Data Integration

Nurture will use Amazon data pipelines to pass valuable data events (e.g. view events) to analytics.

# Measuring Success

1.

## Analytics

Using data collected from backend servers, sent through a pipeline to a database. Quantitative data collected on app engagement: the number of accounts, story uploads, and stories viewed.



2.

## User Feedback

Conducting surveys among end-users, to collect qualitative data on user experience. This will include user's opinions on relevance, use, and engagement.



3.

## Community Partnerships

Forming many different community partnerships, and evaluating their impact.



4.

## AI Technology

Data collection on the accuracy and validity of AI performance.





## Partnerships & Success

Partnering with local community leaders and centres will be integral to Nurture's success. This includes reaching out to public schools, universities, and community centres to grow a network of cultural storytelling. As the product continues to develop, we hope to partner with larger culture & art centres such as the Royal Ontario Museum.

The benefit of partnering with Nurture:

- Exclusive pricing for our premium package partner students/employees
- Nurture provides a personal approach to storytelling that is relevant to our time and is accessible to all. Our partners would be able to leverage this for their initiatives.
- Through engagement with community-level partners, there is an opportunity to highlight storylines and support the preservation of cultural storytelling.



# Risks Nurture Will Anticipate

## 1. Validity of stories on shared portion of app

To address this, these stories on the first iteration of the app will be populated by community hubs so that they are verified for legitimacy.

## 2. One point of view dominating

There is a risk of one side of an event being neglected in the story. To combat this, we can provide users the opportunity to submit their lesser known POV submitted for validation.



# Timeline



## Problem Generation

Defining a suitable problem space.



## Idea Generation

This is the current stage for Nurture.



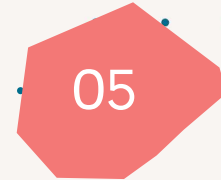
## Prototyping

Beginning to design and build a low and high fidelity app.



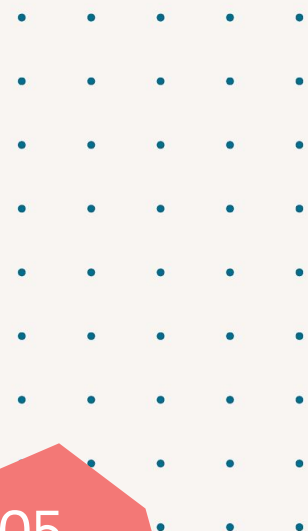
## User Research

Continue to research and iterate on the prototype design.



## Development

Develop a MVP of Nurture.



# What Nurture Needs

1. **AWS credits** to develop Nurture into a robust mobile app for Android and iOS platforms.
2. **Consultants.** Our team can benefit from guidance provided from software engineering, non-for-profit, and academic (art & culture, information management, history disciplines) backgrounds.

# The Team

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# Resources

## Academic Papers

- <https://www.tandfonline-com.myaccess.library.utoronto.ca/doi/pdf/10.1080/15283488.2019.1633926?needAccess=true>
- [https://journals-scholarsportal-info.myaccess.library.utoronto.ca/details/17475759/v45i0002/145\\_cmwtmikstg.xml](https://journals-scholarsportal-info.myaccess.library.utoronto.ca/details/17475759/v45i0002/145_cmwtmikstg.xml)
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- [https://journals-scholarsportal-info.myaccess.library.utoronto.ca/pdf/17475759/v45i0002/145\\_cmwtmikstg.xml](https://journals-scholarsportal-info.myaccess.library.utoronto.ca/pdf/17475759/v45i0002/145_cmwtmikstg.xml)

## Articles

- <https://hackernoon.com/understanding-speech-recognition-to-design-better-voice-interfaces-bef36b8614f>
- [https://www.huffpost.com/entry/how-digital-storytelling-\\_b\\_5766946](https://www.huffpost.com/entry/how-digital-storytelling-_b_5766946)

## Consensus

- <https://www.toronto.ca/city-government/council/2018-council-issue-notes/2018-refugees-issues-note/>
- <https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?Lang=E&Geo1=POPC&Code1=0944&Geo2=PR&Code2=35&Data=Count&SearchText=toronto&SearchType=Begin&SearchPR=01&B1=All&TABID=1>

## Icons for Mockups:

- <https://www.flaticon.com/authors/freepik>

## Competitors

- <https://apps.apple.com/au/app/indigital-storytelling/id1175426887>
- <https://accan.org.au/grants/completed-grants/620-aboriginal-young-people-in-regional-victoria-and-digital-storytelling-supporting-digital-literacy-through-a-local-community-approach>

The background is a light beige color. On the left side, there is a large red polygon and three parallel teal lines below it. On the right side, there is a grid of small orange dots. In the bottom right corner, there is a pink polygon. A white rectangular box is centered on the slide, containing the text 'Thanks!' and the credits.

# Thanks!

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