

# WISEST SRP 2020 Final Project:

# Creating Demos For Games to Reinforce Cree-language Learning

Mekha George, Owen McLeod, Nicole Zhao, Carrie Demmans Epp EdTeKLA Research Group, Dept. of Computing Science













## What is CreeTutor?

CreeTutor is a project that aims at teaching new learners Plains Cree through a web-based system of games.

CreeTutor was created to enable Cree learners, and assist in the preservation of this Indigenous language.

Cree is a dying language, as the percentage of people who speak Cree as a first language is dropping every year. This project may aid in revitalization as language is a vital part of one's culture.





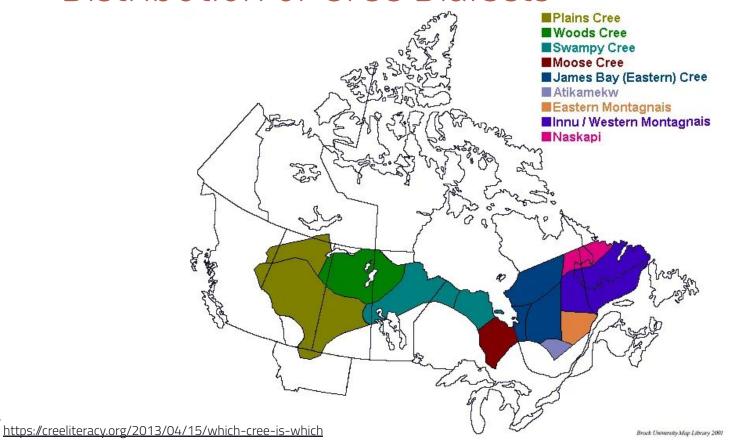
## What is Cree?

- Cree is spoken across Canada (from Alberta to Newfoundland) and it is the most widely spoken First Nations' language in North America.
- The specific dialect of Cree that is focused on in CreeTutor is called 'Plains Cree', 'Western Cree' or the 'Y-dialect'.
  - This dialect of Cree is primarily spoken in Alberta and Saskatchewan, but is also spoken in Manitoba and Montana.



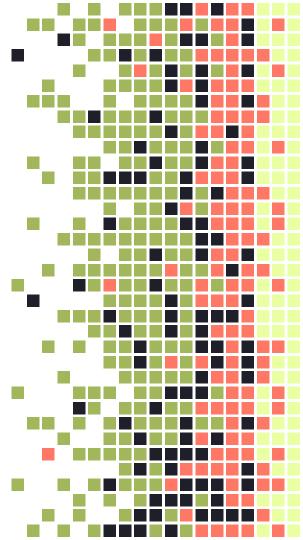


## Distribution of Cree Dialects





The CreeTutor website consists of various games to reaffirm learning. However, demos or visual instructions do not exist for these games.





## How the project was executed







# Setting Up the CreeTutor System

In order to start my project, CreeTutor had to be set up on my computer:

1. We had to download and install these applications















# Setting Up the CreeTutor System - Continued

- 2. We made accounts for Github and Postgres, and set up our remote connection to the code repository on Github.
- 3. Then we populated the postgres database using python scripts, and established a project in pycharm for the project.

This process took 2 days, however, Nicole was very patient with Caitlyn and I, which made the process slightly easier.







# Running Games and Creating Scripts

To create the demos, I had to run the games to ensure that they are working and that I could understand them.

Once I understood how to play them and what the purpose behind them was, I created scripts to go along with the demo videos.

These scripts would become the voice-overs that accompanied the videos to explain the games.





## Filming Process

#### To film the demos, I:

- 1. Set up a split screen with the CreeTutor website on one side, and the script for each demo on the other.
- 2. Started recording on TinyTake, as I do a walk-through of each game, explaining every step as I go.
- 3. Downloaded each demo onto my computer, then made any edits if needed.







## Technologies Required in Making the Demos

In order to access and run the games, the following applications were used:

- Pycharm
- Github
- Python
- Docker

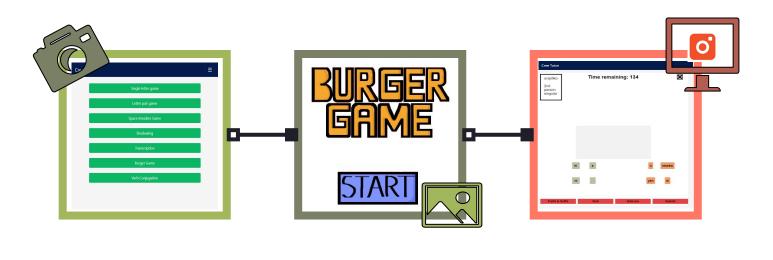
In order to film the demos, the following applications were used:

- TinyTake
- Windows Photo Editor





## Demo Video Screenshots







# Obstacles faced throughout the project

- 1. During the initial set-up, none of the programs would work on my computer except for postgres.
- Once CreeTutor was set up, only two of the games would run:
  a. Verb Conjugations and Burger Game
- 3. Burger Game wouldn't give me prefixes or suffixes, nor would it return the correct score.
- 4. Sometimes TinyTake would cut out my voice from parts of the videos, so I would have to redo them.





## How the obstacles were addressed

- 1. Nicole and Owen both worked with me to make sure that the programs were working, and we made adjustments to the server to suit Windows.
- 2. Owen and I worked together to fix the code on my computer, and I pulled a commit from github to get the Single Letter Game and the Letter Pair Game to work.





# How the obstacles were addressed - Continued

- 3. I learned how to report bug issues on github by doing so for the Burger Game.
- 4. I carefully listened to the audio of the videos to find out where TinyTake would cut it out, and I would pace myself and change the timing accordingly.





## What I learned

Some skills that I learned from this project include:

- How to add and change databases on postgres
- How to create issues on github
- How to make changes to code on github
- How to pull commits (changes in code) from github into pycharm
- How to film tutorials for games
- How to collaborate and contribute to a lab in a virtual setting





## What I would do in the future

#### If I had more time;

- I would try to get all the games to work so that I could make demos for all of them as opposed to just the 3 games that did work (Verb Conjugations, Single Letter Game, Letter Pair Game)
- 2. I would have also liked to learn more about User Experience and User Interaction (UX/UI) issues, as that was a secondary part of my project that I did not have time to complete.





## Thank You!

#### **Sponsors**

I would like to thank my sponsors (Edmonton Chapter of Beta Sigma Phi and Motorola) for funding WISEST, and therefore allowing me to have this amazing opportunity.

#### EdTeKLA Group

I would also like to thank all the members of the EdTeKLA Group, especially Carrie Demmans Epp, Owen Mcleod, and Nicole Zhao for helping me and for being an amazing group to work with.

#### Deb & Bridget

I would like to thank Deb and Bridget for being amazing coordinators and for organizing everything! This program would not have been the same without you.

#### **SRP Students**

I would like to thank my fellow SRP students for being such an amazing group to work with and to be around. You guys made this program special, and I am sad to see it come to an end.

#### **Mentors**

I would thank all the mentors who volunteered to come talk to us and to tell us their stories. The connections we made with all of you through this program are irreplaceable..





# Bibliography

- Plains Cree. (2020, July 09). Retrieved from <a href="https://en.wikipedia.org/wiki/Plains">https://en.wikipedia.org/wiki/Plains</a> Cree
- Politis. (2016, August 16). How to speak Cree. Retrieved from <a href="https://www.canadiangeographic.ca/article/how-speak-cree">https://www.canadiangeographic.ca/article/how-speak-cree</a>
- E. (n.d.). Research Projects. Retrieved from <a href="https://spaces.facsci.ualberta.ca/edtekla/research-projects/">https://spaces.facsci.ualberta.ca/edtekla/research-projects/</a>
- Which Cree is which? (2017, October 02). Retrieved from <a href="https://creeliteracv.org/2013/04/15/which-cree-is-which">https://creeliteracv.org/2013/04/15/which-cree-is-which</a>
- Teodorescu, D., Korostelev, I., Lothian, D., & Demmans Epp, C. (2020, February 14). (PDF) Plains Cree (nehiyawewin) Language Technologies to Enable Downstream Applications. Retrieved from <a href="https://www.researchgate.net/publication/340265252">https://www.researchgate.net/publication/340265252</a> Plains Cree nehiyawewin Language Technologies to <a href="mailto:Enable-Downstream">Enable Downstream Applications</a>
- Oracle Database Cliparts #2881143 (License: Personal Use). (n.d.). Retrieved from http://clipart-library.com/clipart/866740.htm
- Turo, E., Lozano, E., Reviewer, A., & Goyal, N. (2018, June 27). TinyTake Pricing, Features, Reviews & Comparison of Alternatives. Retrieved from <a href="https://www.getapp.com/collaboration-software/a/tinytake/">https://www.getapp.com/collaboration-software/a/tinytake/</a>

