

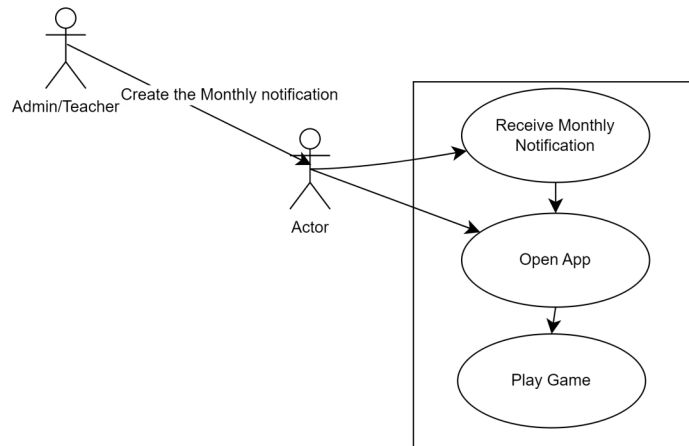
# Mi'kmaq Learning App Software Requirement Specifications

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Audas, Samuel Kohler, Riley Winchester

### Design Constraints:

- [ID-01] The Mi'kmaq App shall be developed using a responsive design framework.
- [ID-02] The Mi'kmaq App shall utilize React for front-end development.
- [ID-03] The app must provide interactive vocabulary lessons featuring Mi'kmaq words, including audio pronunciations.
- [ID-04] Users must be able to take quizzes to test their knowledge of Mi'kmaq words and phrases, with instant feedback provided.
- [ID-05] **The app must send notifications for new lessons every month.**
- [ID-06] Users must be rewarded with achievement badges for reaching milestones, such as completing quizzes.
- [ID-07] The app must support multiple languages for the interface to accommodate non-Mi'kmaq speakers or those who are learning.
- [ID-08] The order of the app grid shall be shuffled upon every session.
- [ID-09] The dropdown will help switch between months.
- [ID-10] The app allows the user to share their achievements and progress with their teachers and also friends.

UML use case Design: user getting a notification every month to try the new grid and new lesson. [An expression of the number of chances being equal to the number of words activated depending on the month chosen]



Matthew Audas

[ID-01] - There will be inactive panels when needed

[ID-02] - There will be audio recordings for words used

[ID-03] - The game space will not be cluttered

[ID-04] - The game space will be labeled

[ID-05] - The Try Again button will be placed on the game grid following a completed attempt

[ID-06] - The game shall contain a maximum 21 Mi'kmaq words

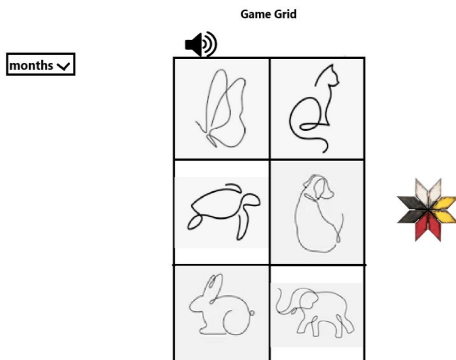
[ID-07] - **The game grid will appear in the center of the screen**

[ID-08] - The game will be fun for children to use

[ID-09] - The drop-down menu will be to the left of the game grid

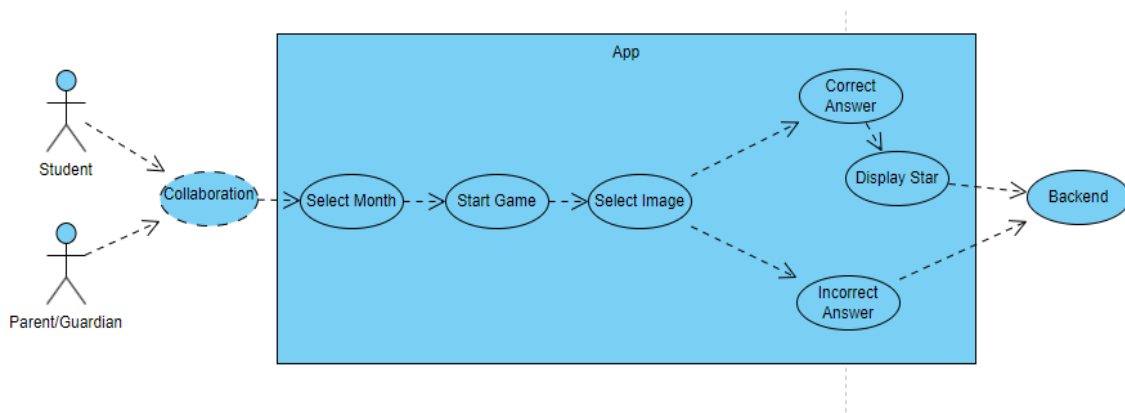
[ID-10] - There will be a drop-down menu

UI Sketch



UML

Student and Parent playing one round.



Riley Winchester

**[ID-01] - The drop-down menu shall only contain options written in Mi'kmaq.**

[ID-02] - The drop-down menu shall list the months from September to March inclusive.

[ID-03] - Using the drop-down menu while the game is active will immediately start a new game

[ID-04] - The game shall provide equal attempts to the number of active words.

[ID-05] - The game shall terminate after all attempts have been made.

[ID-06] - For each correct guess the player is awarded a Mi'kmaq star.

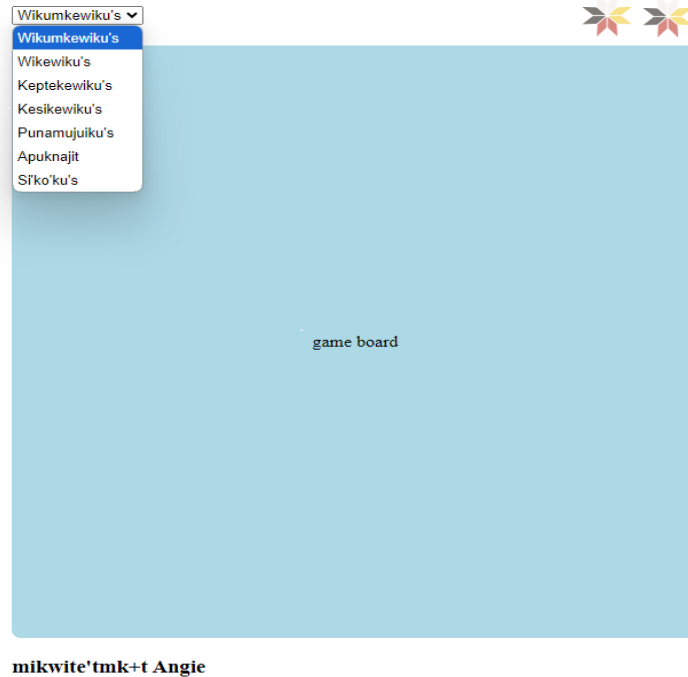
[ID-07] - The awarded Mi'kmaq stars are visible for the duration of the game.

[ID-08] - All text must be lower-case.

[ID-09] - A dedication to Angie must be visible on screen.

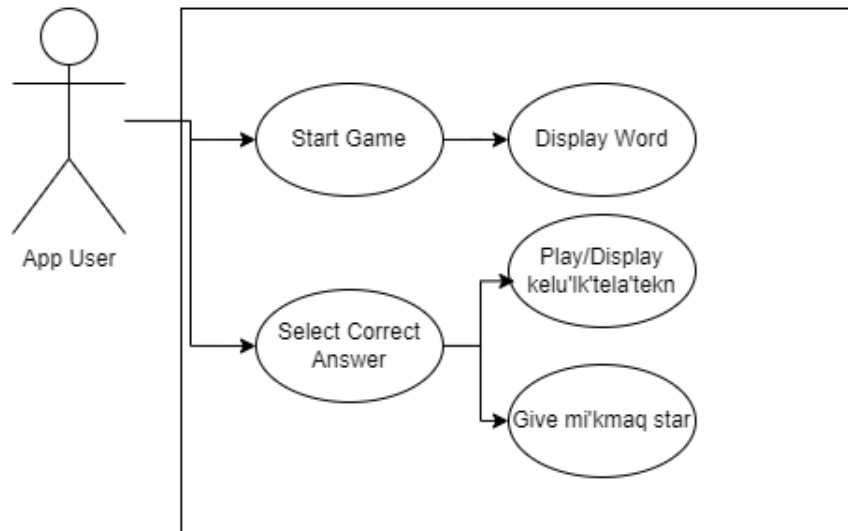
[ID-10] - Angie's name must be capitalized.

Graphical Mockup:



## UML Use Case Diagram

**This use case diagram represents one student's round of play with a correct answer given.** The student can view or listen to the word being guessed, search the game board for the correct correlating image, or select the correct answer. When the correct answer is selected, the “congratulations” audio is played in Mi’kmaq, and the student is awarded a Mi’kmaq star.



Cohen Creighton

- [ID-1001] The game shall terminate upon opening the drop-down menu
- [ID-1002] The dictionary shall have every word used listed on the same page
- [ID-1003] Every word in the dictionary shall have a corresponding image
- **[ID-1004] Every word in the dictionary shall have a corresponding audio track**
- [ID-1005] The font used on the app shall be comic sans serif
- [ID-1006] The text used in the app shall be lowercase
- [ID-1007] The player is given a star for every correct answer
- [ID-1008] The game shall keep tally of all the stars the player receives
- [ID-1009] The dictionary shall be all displayed on one page
- [ID-1010] The grid shall fit the screen of a cell phone

UI mockup of Mi'kmaq app dictionary



Word/term

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Word/term



Associated image

Audio

Translation

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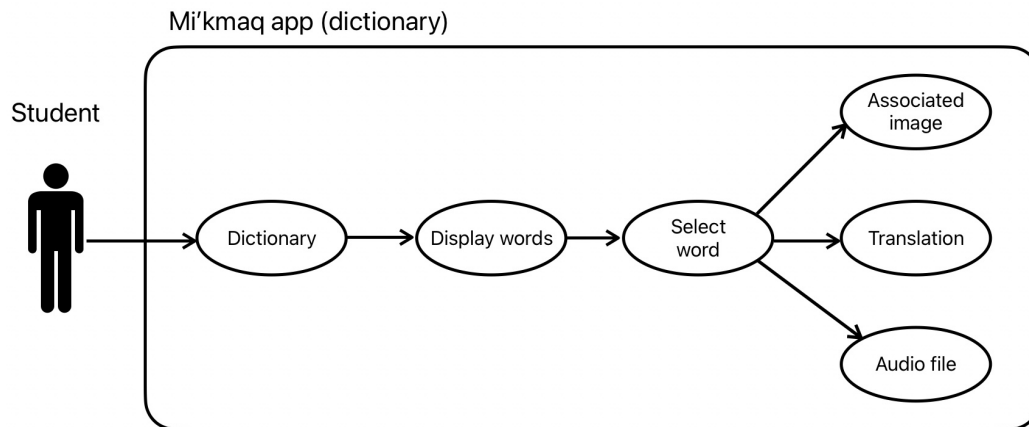
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First, all the words and terms in the dictionary are listed together. After clicking on a word or term, it expands and shows a translation, along with an associated image and an audio track to hear the word or term.

UML Diagram – Dictionary – user accesses dictionary which then displays a list of all the words, after selecting a word, there will be a translation, associated image to



describe the word and an audio file saying the word itself



Sam Kohler

[ID-01] The game is played on a 3x3 grid of images

[ID-02] Only images associated with active words are displayed on the grid of images [ID-01]

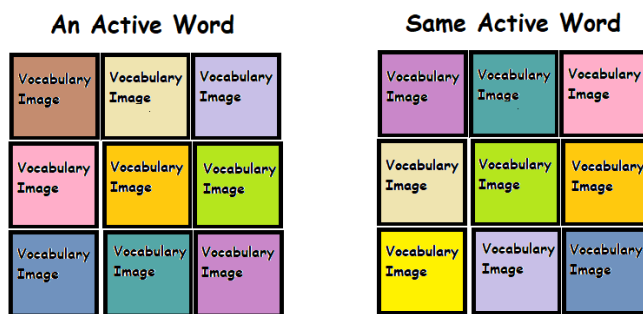
[ID-03] The grid contains the vocabulary image associated with the active word being used in the round

[ID-04] An active word is only used in a round once per game session

[ID-05] The ordering of words used in rounds of a game session is random.

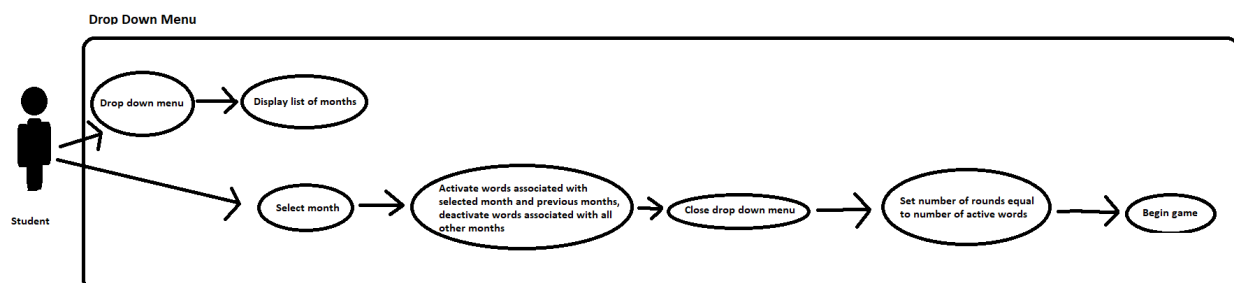
- [ID-06]      **The arrangement of the vocabulary images in the 3x3 grid is random**
- [ID-07]      Each unique vocabulary image is only used once per round
- [ID-08]      An audio recording of the word “kjinu’kwalsi ap” is played after a wrong answer is given
- [ID-09]      An audio recording of the word “kelu’lk tela’tekn” is played after a correct answer is given
- [ID-10]      When hovering over a vocabulary image, the vocabulary image becomes 80% transparent

UI Sketch:



UML Case Diagram:

An expression of the number of rounds being equal to the number of active words depending on the month chosen



Elyse Louis

[ID 01] The app interface will be visually appealing to 4 to 5 year olds.

**[ID 02] The colours used in the interface will include primary colours.**

[ID 03] The images used will be comprehensible to 4 to 5 year olds.

[ID 04] The app's functionality shall be easy for 4 to 5 year olds to navigate.

[ID 05] There shall be no "Home" page.

[ID 06] There shall be no "Home" button.

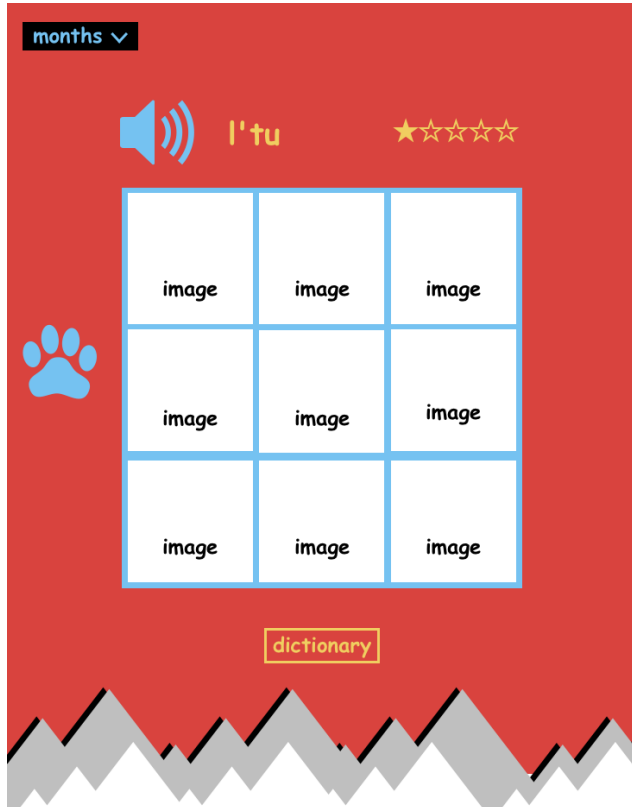
[ID 07] There shall be no "Click here to play" button.

[ID 08] There must be a draggable bear paw on the left of the grid.

[ID 09] There shall be no option to change the grid size.

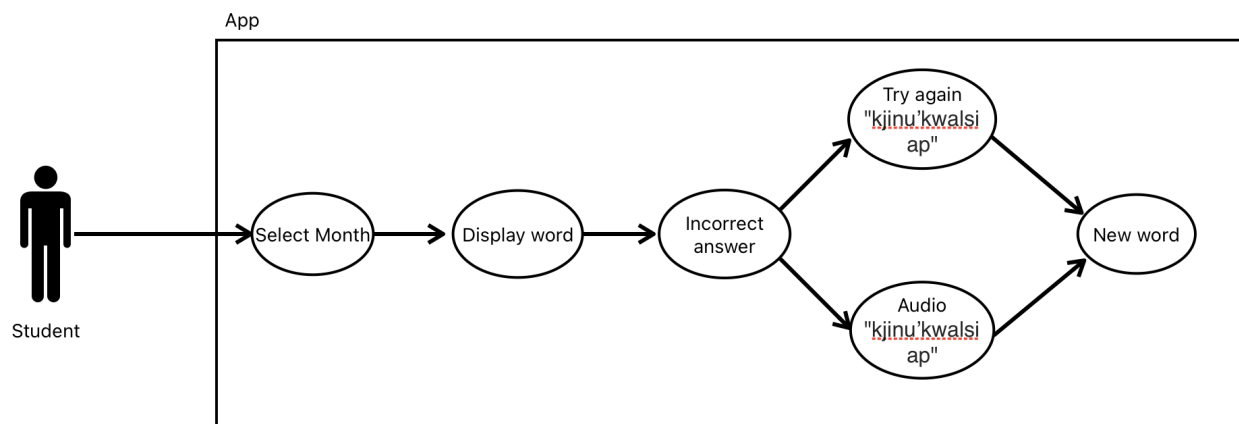
[ID 10] There shall be a link to the dictionary present at all times.

UI Sketch – primary colours used to make the interface appeal to young children:



### UML Use Case Diagram:

One student's round of play with incorrect answer given – The student chooses one of seven months, sees or hears the Mi'kmaq word and chooses the incorrect answer. The game displays "kjinu'kwalsi ap" and plays the corresponding audio, and the player is taken to a new word to start again.



## Dictionary

Round:	A section of gameplay
Game session:	A collection of rounds which totals one whole gameplay
Vocabulary image:	An image associated with a word in the dictionary
Selector image:	A draggable image used to select a Vocabulary image
Activated words:	Words available for use