

ICS4U – Unit 2 Project – Tic Tac Toe Variant Game

Ms. Frizzle is a grade 3 teacher. She has a few students who always finish their work early. All of the students in her class are passionate about Tic Tac Toe and play every chance they get. She would like to allow them to use their computers to play a game of Tic Tac Toe, but commercially available games often have deep privacy violations. Many of the parents in her class are upset about this and Ms. Frizzle is worried about simply downloading files from the Google Play or Apple store. As well, many apps require users to be connected to the internet and Ms. Frizzle's wifi doesn't often work.

Thus, Ms. Frizzle would like you to code her some simple apps for the students who finish their work early to play. The app can be a one player or two player app. You may not have an array of widgets, but an array is allowed behind the scenes to store data. Ms. Frizzle's class is especially fond of Tic Tac Toe and loves playing variants of the game.

Your app will be created in Java, using Applets and JButtons, JLabels and other widgets. You may add screens to the app if you wish (instructions, settings, credits). Adding extra features is encouraged.

You should have a clear theme and colour scheme. Do not merely pick colours yourself, these are discerning grade 3s who all achieved A+++ on their colour exam (and it was really hard). Use professional colour scheme generator. When I used google, this one came up: <http://paletton.com>, it is fine. If you need a lot of pictures, I recommend: <http://www.iconarchive.com/categories.html>. In fact, you may wish to pick your theme based on the pictures you can find. Do not STRETCH or PIXELATE your pictures. Maintain the dimensions or chop them off.

Do not pick too hard a game. You have one week to code it.

Approved game choices:

1. Random (flip a coin to see who goes next)
2. Misere (first in a row loses)
3. Notakto (both use X, first in a row loses)
4. Pop'n a row (roll animal dice to your animal)
5. Spin'n a row (? you make it up)
6. Wild (choose either x or o)
7. Wild Misere
8. Remove (can place your piece or remove opponent's)
9. Switch (can place your piece or switch opponent's)
10. Tic-Tac-Surprise (wild cards)
11. Dice (roll dice, can take any square it matches)
12. Quiz (answer questions)
13. AI
14. Treblecross (all x, in a long row)
15. Number (evens vs odds, add to 15)
16. Secret X (price is right)
17. Gobbet Gobblers
18. Otrio
19. Mojo
20. Nim

Other games are possible. Ask if you would like another.