

# Ninja Bear's Grammar Game

{ Fernando Ellis & Kathleen Tigue



# Why a Grammar Game?

- We wanted to do something different.
- Hits home for Katie.

# Research - Start!

4.L.4.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

4.L.4.1.a Use relative pronouns (who, whose, whom, which, that) and relative adverbs (where, when, why).

Identify relative pronouns (Fourth grade - V.1)

Use relative pronouns: who and whom (Fourth grade - V.2)

Use relative pronouns: who, whom, whose, which, and that (Fourth grade - V.3)

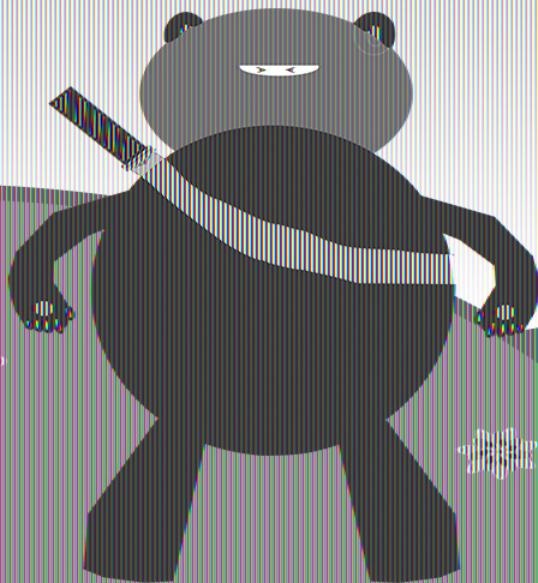
Use relative adverbs (Fourth grade - Y.3)

# Testing Relative pronouns: Who, Whom, Whose, Which, and That

There will be a picture displayed of a character that is clearly a boy or a girl holding an object. The player will have to click on words in the word box on the bottom to create a sentence that describes the character and what they are holding.



# Ninja Bear Grammar Game



Build sentence  
structure skills

Practice reading  
and punctuation

Improve writing  
skills with fun art

Play online

# What stumbling blocks were there?

- Senioritis
- Busy Schedules

	Sun 4/26	Mon 4/27	Tue 4/28	Wed 4/29	Thu 4/30	Fri 5/1	Sat 5/2
GMT-04							Imagine RIT
8am		8 – 9 DSA1 - TA		8 – 9 DSA1 - TA			8 – 9 DSA1 - TA
9am		9 – 9:50 Demo she		9 – 9:50 IGM Production Studio			9 – 9:50 IGM Production Studio
10am		10 – 11 Cup	9:30 – 10:30 Group Lesson - Chapel		9 – 2p Grading DSA1	9 – 11 Office Hours	
11am			10:30 – 2p Grading DSA			10 – 11 Order Maggi	
12pm	12p – 1p Mod appreciation day	12p – 12:50p Intro to Music Theory		11 – 12p Kathleen Walk in Hours		10:30 – 11:30 Flute Lessons	
1pm		1p – 2p Grading DSA1		12p – 12:50p Intro to Music Theory	11 – 12p Q Center Meeting	11:30 – Dunk KT	
2pm		2p – 2:50p Music In The US	2p – 3:15p Rich Media Web App Dev II	1p – 2p Grading DSA1	12p – 1p Frenando	12p – 12:50p Video Paper	
3pm				2p – 3:15p Music In The US		1p – 3p Senate	
4pm	4p – 6p Tri Sigma Meeting			3p – 4p Kyle Leslie	2p – 3:15p Rich Media Web App Dev II	2p – 3p Meetin Lucas	2p – 2:5 Music Tech
5pm		5p – 6:15p Humanitarian FOSS Development	5p – 6:15p Concert Band	5p – 6:15p Humanitarian FOSS Development	3:30p – 4:30p Wic meeting	3p – 5p Office Hour	3p – 4p FW: SG Tech
6pm	6p – 8p Study Hours		6:30p – 12 Lovin' Cup with Biggles			5p – 6p Elections	
7pm					7p – 8p Derby days		
8pm		8p – 9p					

# What worked out?

- We divided and conquered the work pretty easily.
- Sugar worked pretty well for us.
- PyGame++

# Easiest part of the code

```
# Load text somewhat in the upper middle of the screen
def Title_Text(self, screen, text):
    Font = pygame.font.SysFont("monospace", 64)
    Title = Font.render(text, False, (0, 0, 0))
    center_x = (self.space_width - Title.get_rect().width)/2
    center_y = (self.space_height - Title.get_rect().height)/2
    screen.blit(Title, (center_x, center_y))

def Button_Text(self, screen, text, button):
    Font = pygame.font.SysFont("monospace", 40)
    Title = Font.render(text, False, (0, 0, 0))
    center_x = (button.size[0] - Title.get_rect().width)/2
    center_y = (button.size[1] - Title.get_rect().height)/2
    screen.blit(Title, (button.x + center_x, button.y + center_y))
```

# Hardest/worst part of the code

```
def Game_Menu(self, screen):
    self.flush_ButtonList()
    screen.fill((255, 255, 255)) # 255 for white
    RP = pygame.draw.rect(screen, (0, 255, 0), (565, 290, 463, 111))
    PP = pygame.draw.rect(screen, (255, 0, 0), (565, 416, 463, 111))
    CS = pygame.draw.rect(screen, (255, 255, 0), (565, 542, 463, 111))
    quit_rect = pygame.draw.rect(screen, (0, 0, 255), (535, 668, 463, 111))
    btnA = MenuButton(RP.x, RP.y, RP, RP.width, RP.height, "GAME_RP")
    btnB = MenuButton(PP.x, PP.y, PP, PP.width, PP.height, "GAME_PP")
    btnC = MenuButton(CS.x, CS.y, CS, CS.width, CS.height, "GAME_CS")
    btnQuit = MenuButton(quit_rect.x, quit_rect.y, quit_rect, quit_rect.width, quit_rect.height, "MainMenu")
    self.add_to_ButtonList(btnA)
    self.add_to_ButtonList(btnB)
    self.add_to_ButtonList(btnC)
    self.add_to_ButtonList(btnQuit)
    TS = pygame.image.load(file('images/gamescreen.jpg.png'))
    screen.blit(TS, (0, 0))
```

# More time?

- Added more minigames!
- More items!
- More Trophies!

# Questions?

- <http://www.ixl.com/standards/new-york/ela/grade-4>
- [https://github.com/fortnight/Grammar\\_Game](https://github.com/fortnight/Grammar_Game)