

CompSci 94

Scorers and Timers

November 5, 2024

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Prof. Susan Rodger

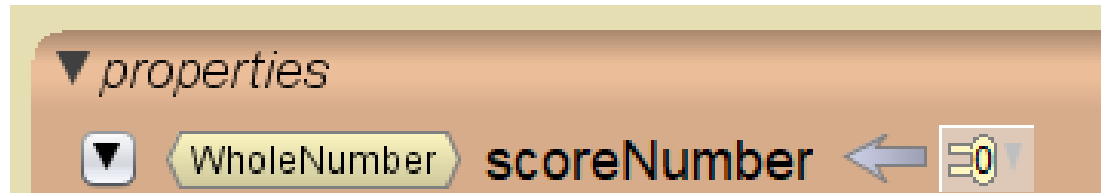
Announcements

- Videos and online quiz for next time
- Assignment 5 due Thursday, Nov 7

Q1: What do you use in Alice to keep track of and display a score?

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- TextModel
- TextModel property of type wholeNumber

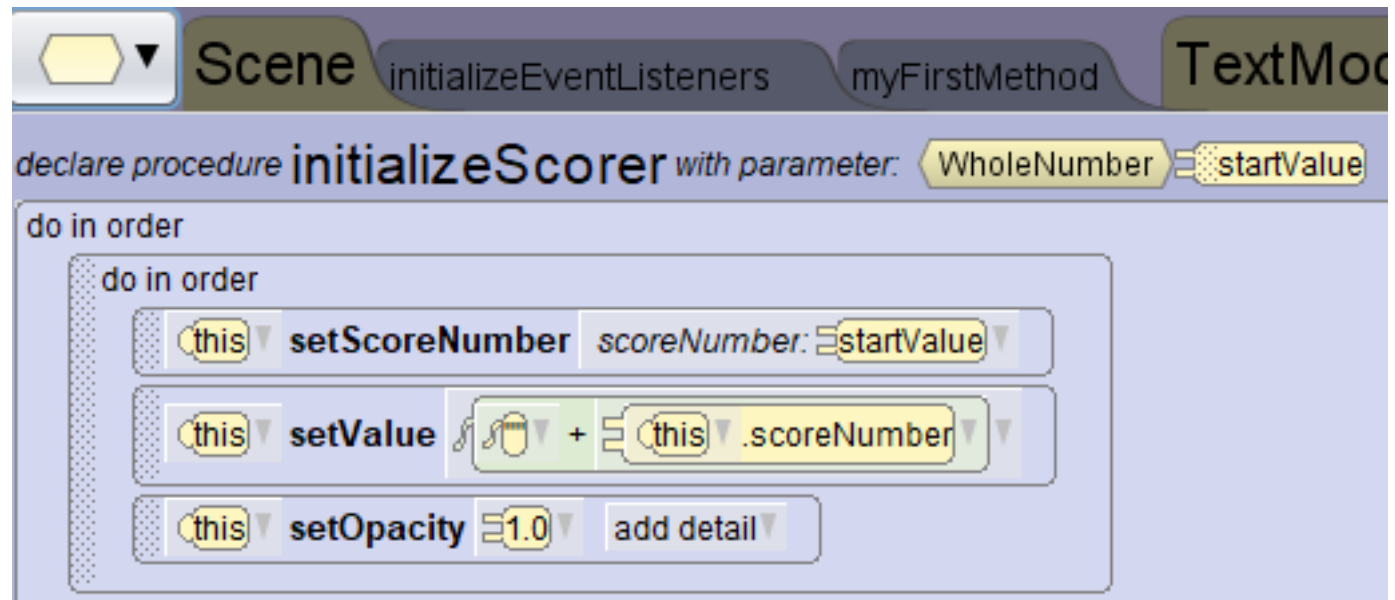


- The property keeps track of the score value
- The textModel displays the score value

Q2: What code would you put in the Procedure InitializeScore?

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- Set the property to 0
- Display the property as a textString “0”
- Make the score value visible – turn on the score



Q3: What code would you put in the procedure `updateScore`?

Q3: What code would you put in the procedure updateScore?

- Add one to the property
- Display the properties value as a textString

The image shows a Scratch code editor window with the following code:

```
declare procedure updateScore with parameter: WholeNumber amount
do in order
  do in order
    this setScoreNumber scoreNumber: this.scoreNumber + amount
    this setValue [ ] + this.scoreNumber
```

The code is written in a Scratch-style block-based language. The procedure `updateScore` takes a parameter `amount` of type `WholeNumber`. It contains two nested `do in order` blocks. The inner block contains two actions: `this setScoreNumber scoreNumber: this.scoreNumber + amount` and `this setValue [] + this.scoreNumber`. The `setValue` block has a small icon in the input field, likely representing a text string.

Q4: If the game is click on a bunny and get a point, where do you update the score in the program?

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- Must have an event for clicking on a bunny, a `MouseClickedOnObjectListener`.
- Update the score in this event.

Q5: What do you use in Alice to keep track of and display a timer?

Q5: What do you use in Alice to keep track of and display a timer?

- TextModel
- TextModel property of type wholeNumber
- The property keeps track of the timer value
- The textModel displays the timer value

Q6: What would the Procedure
InitializeTimer do?

Q6: What would the Procedure InitializeTimer do?

- Set the property to 20? 30? How many seconds do you want to give the player to play the game?
- Display the property as a textString “20”
- Make the timer value visible – turn on the timer

Q7: What would the procedure
updateTimer do?



Q7: What would the procedure updateTimer do?

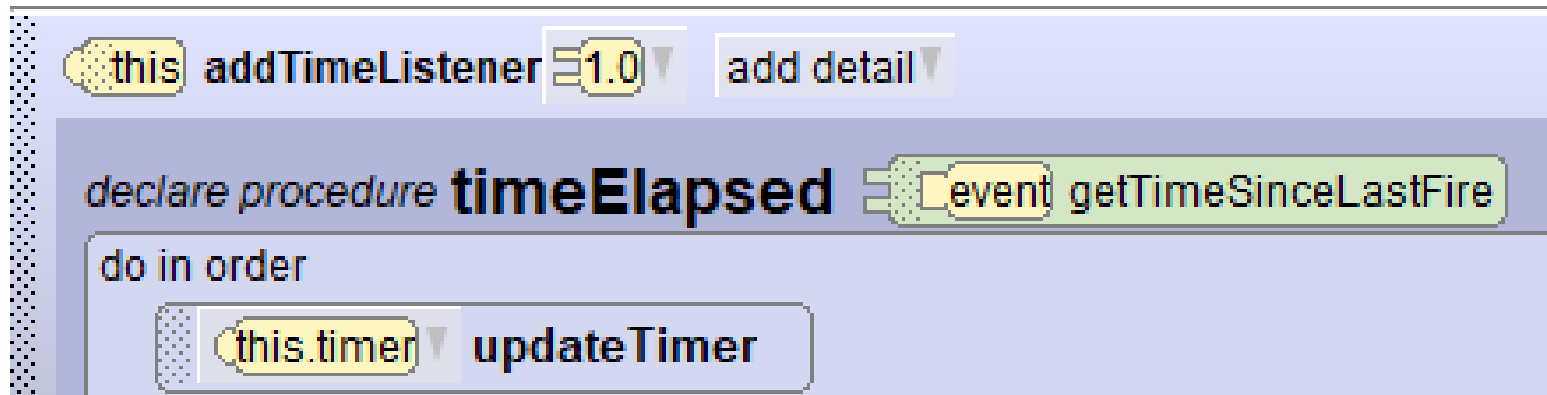
- Subtract one from the property
- Display the properties value as a textString



Q8: Where in the program do you
update the timer?

Q8: Where in the program do you update the timer?

- Use an event addTimeListener
- Can set how often you want the event to run. Run it every 1.0 second.



Class Today

- Add a scorer and timer to the game from last time.

