



**Technovation** iridescent  
**CANADA**

## Unit 9 – Troubleshooting

# Review

- ➔ Weekly Check in
- ➔ Share with the group
  - Highlights of working as a team
  - Progress on your business



# Troubleshooting

- ➔ Tips for debugging your code
- ➔ Debugging: the process that coders use to figure out why their code isn't working

“It's hard enough to find an error in your code when you're looking for it;

it's even harder when you've assumed your code is error-free.”

# Using Test Data

- ➔ Start with simple data to make sure your app works
- ➔ Add more data as you get pieces working
- ➔ Example: App shows the user where the closest restaurant is to them.
  - Fusion table stores the names of restaurants, the location data, style of food and phone numbers.
  - Get started with just two restaurants and location data
  - Get that working then add restaurants and more information about them

# Debug with alerts

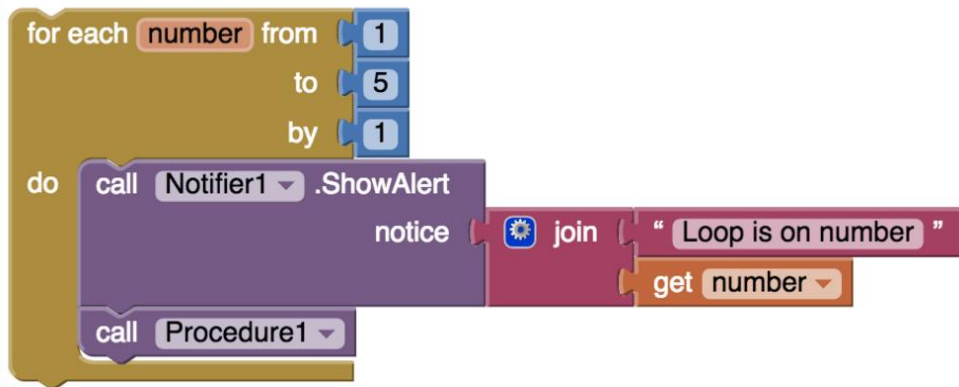
- ➔ Not sure where your app is stuck?
- ➔ Drag in the notifier and use it to set alerts to tell you what code is getting executed

```
when Spinner1 .AfterSelecting
  selection
do
  if
    compare texts get selection = " Option1 "
  then
    call Procedure1
  else if
    compare texts get selection = " Option2 "
  then
    call Procedure2
```

```
when Spinner1 .AfterSelecting
  selection
do
  if
    compare texts get selection = " Option1 "
  then
    call Procedure1
    call Notifier1 .ShowAlert
    notice " This app is doing option1 "
  else if
    compare texts get selection = " Option2 "
  then
    call Procedure2
    call Notifier1 .ShowAlert
    notice " This app is doing option2 "
  else
    call Notifier1 .ShowAlert
    notice " This app isn't doing anything! "
```

# Debug with alerts

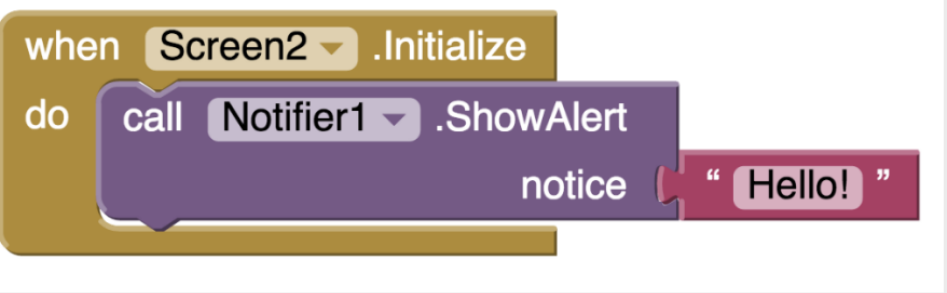
➔ Debugging a loop



```
for each number from 1 to 5 by 1 do call Notifier1 .ShowAlert notice join " Loop is on number " get number call Procedure1
```

The image shows a Scratch code block for debugging a loop. It starts with a 'for each' loop block with 'number' as the variable, ranging from 1 to 5 with an increment of 1. Inside the loop, there is a 'do' block containing three sub-blocks: a 'call Notifier1 .ShowAlert' block with a 'notice' field, a 'join' block with the text ' Loop is on number ' and a 'get number' block, and a 'call Procedure1' block.

➔ Testing which screens are getting called

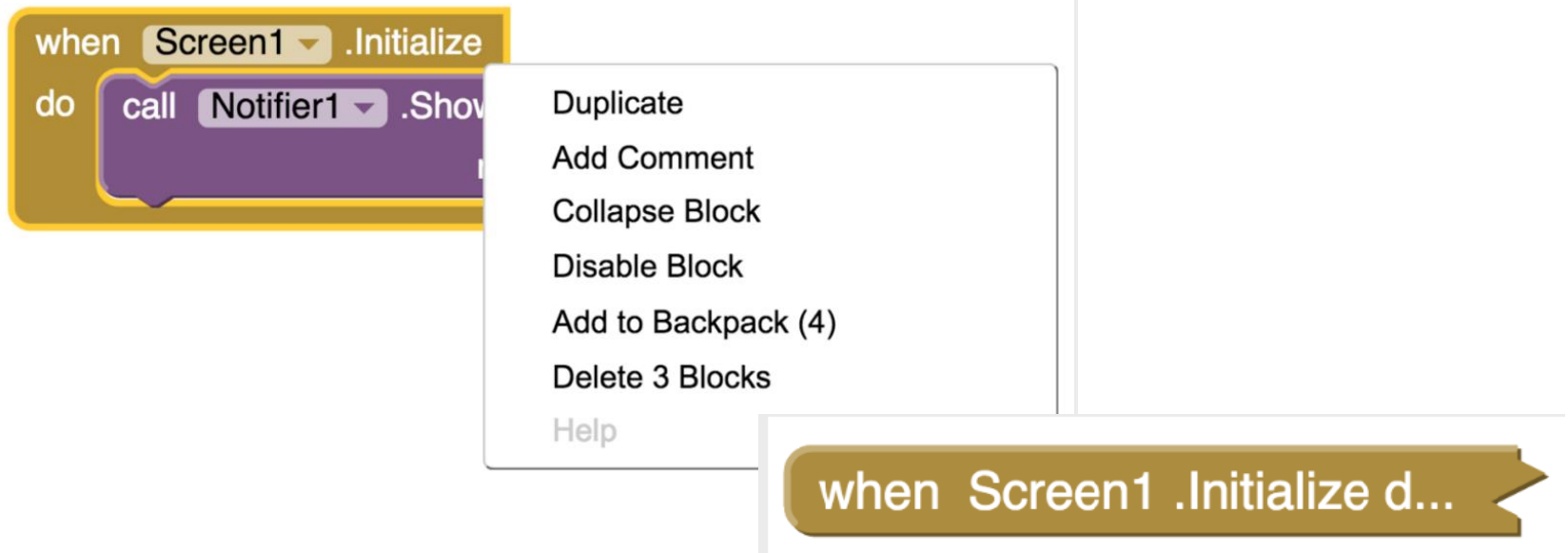


```
when Screen2 .Initialize do call Notifier1 .ShowAlert notice " Hello! "
```

The image shows a Scratch code block for testing screen initialization. It starts with a 'when Screen2 .Initialize' block. Inside the 'do' block, there is a 'call Notifier1 .ShowAlert' block with a 'notice' field containing the text ' Hello! '.

# Collapsing blocks

- ➔ Having trouble focusing on the blocks that aren't working? Collapse the ones that don't need your attention.





# Disabling Blocks

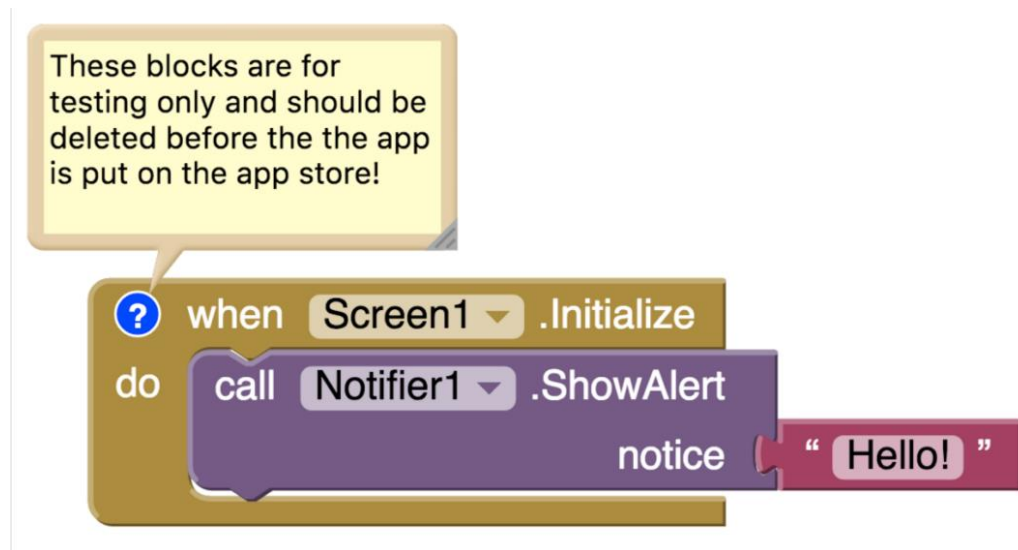
- ➔ Have a block that isn't finished? Disable it while you test the rest.



- ➔ Right click to Enable or Expand the blocks again

# Using Comments

- ➔ Comments help to understand the code – useful for judges, mentors, team-mates looking at your code



# Version Control

- ➔ Save versions of your project
- ➔ When you get a section working save that version
  - You can go back to it if you mess up the next section!
- ➔ The “save project as” option allows you to create a copy of the code you are working and save it under a new name

# April 25 deliverables

- 2 Screenshots of your app prototype
- Source code for your team's app (**at least** 3 functional screens)
- Pitch Video on YouTube under 4 minutes
- Demo Video on YouTube under 2 minutes
- 100-word app description - typed and in PDF format
- Technical checklist with a sentence description of each item +  
Photo of pseudocode and workflow
- **Senior Team Only** Business plan – typed and in PDF format
- Team photo

# How to Submit

- ➔ Use My Team's Submission page
- ➔ In the submission forms for multi-line text, just write a few sentences!
  - App Description should be short and readable
- ➔ Tech. Checklist Explanations just need a sentence “we used tinywebdb to store users”
- ➔ use "how the judges see it“ to make sure it is readable

# Submission Dates

- ➔ Start your submissions early
  - Do NOT leave everything to April 25<sup>th</sup>
- ➔ Join the Ottawa pitch event
- ➔ Deadline for submission April 25<sup>th</sup> 8PM
- ➔ Slides for the live pitch must be emailed to me by May 10<sup>th</sup>

# Ottawa Competition May 12

- ➔ Prizes – Amazon gift cards
  - Senior team \$3000 1<sup>st</sup>, \$1000 2<sup>nd</sup>, \$50 3<sup>rd</sup>
  - Junior team \$1000 1<sup>st</sup>, \$500 2<sup>nd</sup>, \$250 3<sup>rd</sup>
- ➔ Preliminary round 12:30-3PM
  - Rooms will hold teachers, mentors, family, friends
  - 4 minute live pitch, 2 minute demo video, Q&A
- ➔ 3:00 PM Keynote speaker
- ➔ 3:30-4:30 Finalists pitch
- ➔ 4:30 Awards ceremony

# Next Steps

- ➔ Finish your app
- ➔ Continue working on your pitch scripts

