Unit 2 Lesson 1

Your Digital Footprint

Resources
# Mizzle the Mouse

<table>
<thead>
<tr>
<th>Name: Mizzle</th>
<th>Where you live: Mouse Hole</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Mizzle the Mouse" /></td>
<td><img src="image2" alt="Mouse Hole" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pet’s Name: Frank the Flea</th>
<th>Favorite Hobby: Ice Skating</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image3" alt="Frank the Flea" /></td>
<td><img src="image4" alt="Ice Skating" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Favorite Food: Cheese</th>
<th>My favorite photo: <img src="image5" alt="Cheese" /></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name:</strong></td>
<td><strong>Where you live:</strong></td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>My full name is Electra Ella Elephant</td>
<td>123 Watering Hole Lane</td>
</tr>
<tr>
<td></td>
<td>Peanuts, Ohio</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Birthday:</strong></th>
<th><strong>Username:</strong></th>
<th><strong>Password:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>February 21, 2010</td>
<td>gray_toes</td>
<td>bamboo</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Secret:</strong></th>
<th><strong>My favorite photo:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>My brother and I fight all the time</td>
<td>![Elephant Photo]</td>
</tr>
</tbody>
</table>
Your Digital Footprint: Follow the Digital Trail

Directions

Follow the trails of Mizzle the Mouse and Electra the Elephant. Fill in the chart below. Then answer the questions.

<table>
<thead>
<tr>
<th>Question</th>
<th>Mizzle the Mouse</th>
<th>Electra the Elephant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Whose full name do you know?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Whose house could you find?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Whose birth date do you know?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Whose username and password do you know?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Who let out a secret on the Internet?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Which animal can you describe better from his or her photo?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Question

1. Who can the detectives find out more about, and why?

2. Which animal has a bigger digital footprint?
3. Mizzle says some funny things about himself on the Internet. What are they?

4. Is there anything that Electra posted on the Internet that could become a problem for her? If so, what and why?
Your Digital Footprint: Follow The Digital Trail

Directions
Follow the trails of Mizzle the Mouse and Electra the Elephant. Fill in the chart below. Then answer the questions.

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<thead>
<tr>
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<th>Electra the Elephant</th>
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<tbody>
<tr>
<td>1. Whose full name do you know?</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>2. Whose house could you find?</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>3. Whose birth date do you know?</td>
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<td>x</td>
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Question
1. Who can the detectives find out more about, and why?
   Electra, because we now know where Electra lives, what she looks like, and private and personal information about her life.

   (Point out to students that having a bigger digital footprint means the detectives can learn more about them too.)

2. Which animal has a bigger digital footprint?
   Electra, because she put more private and personal information online than Mizzle
3. Mizzle says some funny things about himself on the Internet. What are they?

He says he likes Swiss cheese, his photo is of cheese, and he has a pet flea.

4. Is there anything that Electra posted on the Internet that could become a problem for her? If so, what and why?

Private and personal information (e.g., address, full name) allows others to learn more about her.

This could be unsafe. Saying that she fights with her brother could hurt her brother’s feelings because it is public.
Your Digital Footprint

1. What is a digital footprint?
   a) A track that animals leave behind
   b) Shoes that you buy on the Internet
   c) The information about you on the Internet

2. What kind of information is safe to share online?
   a) Your birth date
   b) Your first name or computer username
   c) Your address

3. Which animal below has the digital footprint that leaves him or her most unsafe?
   HINT: Think about which animal shares the most private information online.

<table>
<thead>
<tr>
<th></th>
<th>a) Fran the fish</th>
<th>b) Betty the Bird</th>
<th>c) Tony the Tiger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hobbies</td>
<td>swimming</td>
<td>flying</td>
<td>going to the 3rd street gym</td>
</tr>
<tr>
<td>Address</td>
<td>the sea</td>
<td>a nest</td>
<td>523 Green Street</td>
</tr>
<tr>
<td>Other</td>
<td>pet’s name is Frank</td>
<td>I love seeds!</td>
<td>My real name is Thomas</td>
</tr>
</tbody>
</table>

a) Fran the fish
b) Betty the Bird
c) Tony the Tiger
Your Digital Footprint

1. What is a digital footprint?
   a) A track that animals leave behind
   b) Shoes that you buy on the Internet
   c) The information about you on the Internet

   Answer feedback
   The correct answer is c. Your digital footprint is the information about you online, such as a news story with your name in it or something that you write online.

2. What kind of information is safe to share online?
   a) Your birth date
   b) Your first name or computer username
   c) Your address

   Answer feedback
   The correct answer is b. It is okay to share your first name or your username online. But sharing your address or birth date could make your information unsafe because other people might use your information to pretend to be you!

3. Which animal below has the digital footprint that leaves him or her most unsafe?
   HINT: Think about which animal shares the most private information online.

   a) Fran the fish
   b) Betty the Bird
   c) Tony the Tiger

   Answer feedback
   The correct answer is c. Tony the Tiger put private information online, like his address, which is not safe. Fran and Betty shared information, but they did not share anything private about themselves.
Unit 2 Lesson 2

Move It, Move It

Resources
### Move It Maps 3 & 4

<table>
<thead>
<tr>
<th>START</th>
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<td><img src="image" alt="Start Icon" /></td>
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<td><img src="image" alt="Yay Icon" /></td>
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These are the moves that you can do to help guide your friend.

Practice a few times to be sure that you both understand what each move does.
YAY!
Each of these algorithms has a mistake. Can you find the mistake and cross it out?

1)  

```
  YAY!  
START   
```

Move North
Move North

2)  

```
START   
YAY!    
```

Move East
Move North
Move East

3)  

```
START   
YAY!    
```

Move South
Move East
Move South
Each of these algorithms has a mistake. Can you find the mistake and cross it out?

1)

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<tr>
<td>YAY!</td>
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<td>START</td>
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Move North

Move North

2)

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<td>START</td>
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<td>YAY!</td>
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Move East

Move North

3)

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<td>YAY!</td>
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</tbody>
</table>

Move South

Move East

Move South
Unit 2 Lesson 3

Sequencing with Angry Birds

Resources
YAY!

START

YAY!

START
These are the moves that you can do to help guide your friend.

Practice a few times to be sure that you both understand what each move does.

North

South

West

East

Rest (No instruction)

Stop (Done)
YAY!
Unit 2 Lesson 4

Programming with Angry Birds

Resources
Happy Maps Game Pieces
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td><strong>YAY!</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>START</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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Practice a few times to be sure that you both understand what each move does.
YAY!
Unit 2 Lesson 5

Programming with Harvester

Resources
Unit 2 Lesson 6

Getting Loopy

Resources
The Iteration

Repeat this part 3 times!

Then do this!

Belly Laugh
Getting Loopy
Unplugged Loops Activity

Looping can save space! What if we wanted to take The Iteration dance below and make more loops inside? Can you circle the actions that we can group into a loop and cross out the ones that we don’t need anymore? Write a number next to each circle to let us know how many times to repeat the action.

The first line has been done for you.

Repeat this part 3 times!

Then do this!

Belly Laugh
Getting Loopy
Unplugged Loops Activity
Getting Loopy
Unplugged Loops Activity

Repeat this part 3 times!

Then do this!

Belly Laugh
Unit 2 Lesson 7

Loops with Harvester

Resources
Lesson Recommendations

Main Activity Notes

Teachers play a vital role in computer science education and supporting a collaborative and vibrant classroom environment. During online activities, the role of the teacher is primarily one of encouragement and support. Online lessons are meant to be student-centered, so teachers should avoid stepping in when students get stuck. Some ideas on how to do this are:

● Utilize **pair programming** whenever possible during the activity.
● Encourage students with questions/challenges to start by asking their partner.
  ○ Unanswered questions can be escalated to a nearby group, who might already know the solution.
● Remind students to use the debugging process before you approach.
● Have students describe the problem that they’re seeing. What is it supposed to do? What does it do? What does that tell you?
● Remind frustrated students that frustration is a step on the path to learning, and that persistence will pay off.
● If a student is still stuck after all of this, ask leading questions to get the student to spot an error on their own.

**Teacher Tip:**

Show the students the **right** way to help classmates:

● Don’t sit in the classmate’s chair
● Don’t use the classmate’s keyboard
● Don’t touch the classmate’s mouse
● Make sure the classmate can describe the solution to you out loud before you walk away
Unit 2 Lesson 8

Loops with Laurel

Resources
Unit 2 Lesson 9

Drawing Gardens with Loops

Resources
Unit 2 Lesson 10

The Right App

Resources
The Big Event
Event Controller

Event-o-matic-inator
You’ve been given a magical controller that changes the picture on the frame on your desk. Take a look below to see what each button does. Can you figure out which series of button events will cause your frame to show the pictures on the right?

Draw a line from each set of pictures to the button combination that causes it. The first one has been done for you.
The Big Event

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Unit 2 Lesson 12

A Royal Battle with Events

Resources
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