Step-by-Step Instructions

1. Frontend: Create the HTML Interface

- Open Notepad++ or any other editor

- In Notepad++, open: explain-translations_pie-nl.html (in the HTML folder)

- Replace "Header", "Title A", "Title B", and "Title C" with your own (e.g., "Fractions" and "Here's a pie chart of a fraction")

```html
<body data-height=905 data-width=1535>

    <div id="canvas">
        <div id="header">Header</div>

        <div class="content_container">
            <div class="section_num">A</div>
            <div class="section_title">
            Title A
            </div>

        <div class="content_container">
            <div class="section_num">B</div>
            <div class="section_title">
            Title B
            </div>

        <div id="question1" class="content_container" style="height: 215px;margin-top: 5px;">
            <div class="section_num">C</div>
            <div class="section_title"  style="padding-bottom: 20px;">
            Title C
            </div>
```

- Replace "Some text" in each step with your own (e.g., "Pie charts show fractions as")

```html
                <div class="question_background">
                    <div class="question_num">1</div>
                    <div class="question_content" style="width:487px">

                        <!-- TEXT FOR QUESTION 1 -->
                        Some text
```

- Replace "option 1,option 2, option 3, option 4" in each step's dropdown menu with your own (e.g., "different fractions,the same fraction")

```html
70                  <!-- DROPDOWN MENU FOR QUESTION 1 -->
71                  <div id="question1_answer" class="CTATComboBox"
72                      data-ctat-labels="----,option 1,option 2, option 3, option 4">
73                  </div>.
```

- If necessary, copy and paste existing components into the text. Replace component id's by a new unique name (e.g., change "question1_answer" to "question1_answer2")

- Replace "filename.png" for the left and the right picture with your own image names (e.g., "pie.png")

```html
<div class="content_background">

    <!-- LEFT PICTURE: replace filename -->
    <img src="pics/filename.png" class ="pic"

</div>

<div class="content_background">

    <!-- RIGHT PICTURE: replace filename -->
    <img src="pics/filename.png" class ="pic"
</div>
```
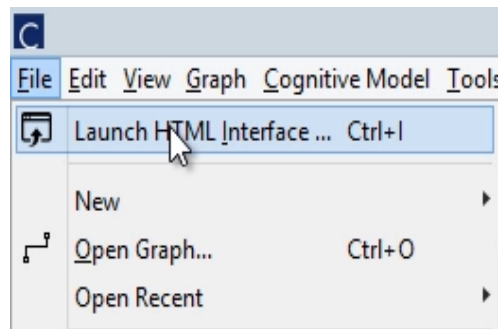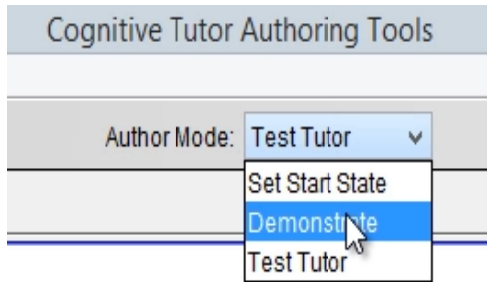
2. Backend: Create the CTAT file for grading and feedback functions

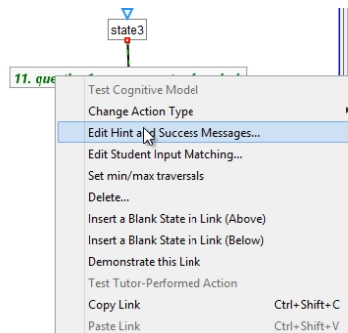- Download and install Cognitive Tutor Authoring Tools (CTAT):
  http://ctat.pact.cs.cmu.edu/

- In CTAT, open: explain-translations_template.brd (in the BRDs folder)

- Launch the interface:

  - File - Launch Interface

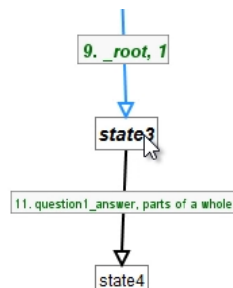
  - Select your HTML file (e.g., explain-translations_template.html)
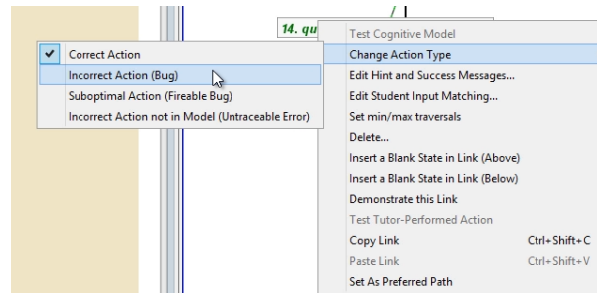
- Set CTAT to demonstrate mode

- In the interface, demonstrate the correct step (e.g., select "parts of a whole" from the drop-down menu)

- In CTAT, add hints:

    o Right-click on the new link

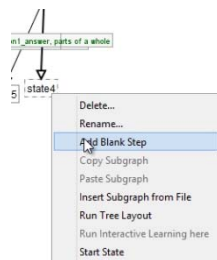   o Select "Edit Hints and Success Messages"

    o Type in your hints messages (e.g., "Pie charts show fractions as parts of a whole.")

- Demonstrate incorrect steps

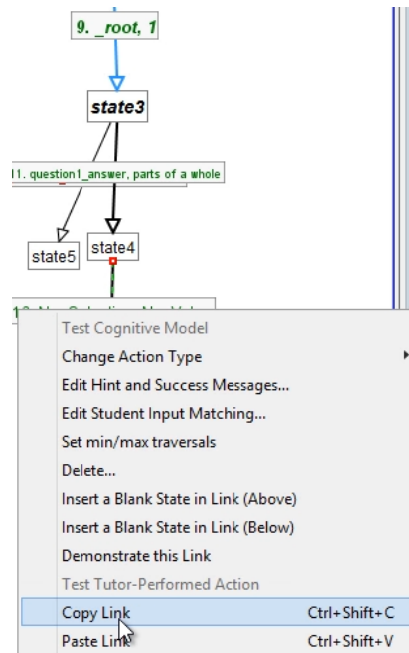   o In CTAT, click on the previous step to activate it in the interface

- o In the interface, select an incorrect answer (e.g., select "numerators" from the drop-down menu)

- o In CTAT, right-click on the new link and select "Change Action Type - Incorrect Action (Bug)"

- o Type in your error feedback message (e.g., " No, this is not correct. A numerator is the top part of a fraction.")

- Advance to the next step

  - o In CTAT, right-click on the last step and select "Add Blank Step"

  - o Right-click on the blue link labeled "11. _root, 1" and select "Copy Link" (or hit Ctrl+Shift+C)

- o Right-click on your new blank step and select "Paste Link" (or hit Ctrl+Shift+V)

- o Right-click on this step and select "Edit Student Input Matching…"

- o In the pop-up window, under Input, change the number "1" to "2"

- Repeat this procedure for all your problem steps

- At the end, create a new blank step and set it to show step 6; this will show the Done button. Click on the Done button in the interface to demonstrate the student clicking the Done button. Once you upload your problem, this will allow TutorShop to automatically load the next problem in the problem set.

3. Upload your Activity to TutorShop

- Go to https://school.tutorshop.web.cmu.edu/

- Log in with your user account and password (create a user account if you don't have one yet)

- Upload your package

  - o In the Menu on the upper left, click on "Packages"

  - o On the bottom right, click on "Import Packages"

  - o On the bottom center, click on "Load Zip"

- Upload the zip file with your problem files (e.g., "explain-translations_pie-nl.zip"; make sure the folder organization is the same)

- Create your problem

  - In the Menu on the upper left, click on "Problems"

  - On the bottom right, click on "New Problem"

  - Fill in the Problem Name

  - Under Package, select your package name (this is the name of the main folder in your zip file, e.g., "explain-translations_pie-nl")

  - Under Problem File, select your CTAT file (e.g., "explain-translations_pie-nl.brd")

  - Under Student Interface, select your HTML file (e.g., "explain-translations_pie-nl.html")

  - On the bottom right, click on "Create"

- Add your problem to a problem set

  - In the Menu on the upper left, click on "Problem Sets"

  - On the bottom right, click on "New Problem Set"

  - Fill in the Problem Name

  - Under Package, select your package name (this is the name of the main folder in your zip file, e.g., "explain-translations_pie-nl")

  - Go into the Problems tab

  - On the bottom right, click on "Add Problems"

  - Select your problem from the list and click "Add" on the bottom right

- Test your problem set

  - In the Menu on the upper left, click on "Problem Sets"

  - Type the name of your problem set in the search field

- Click on the green arrow on the right to run it