

# TRITON TESTING CENTER – AP&M

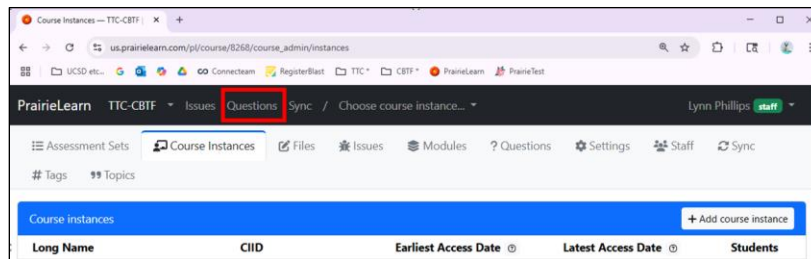
Computer Based Testing Facility (CBTF)

## PrairieLearn: True / False Question

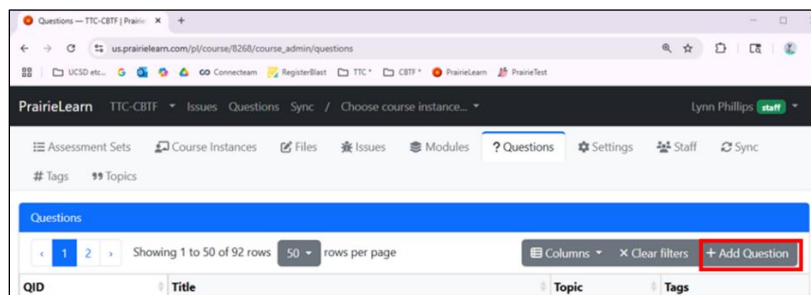
Please follow these instructions to create a true or false question using the “**Multiple choice: random true/false question from list**” template.

### Setting Up the Question

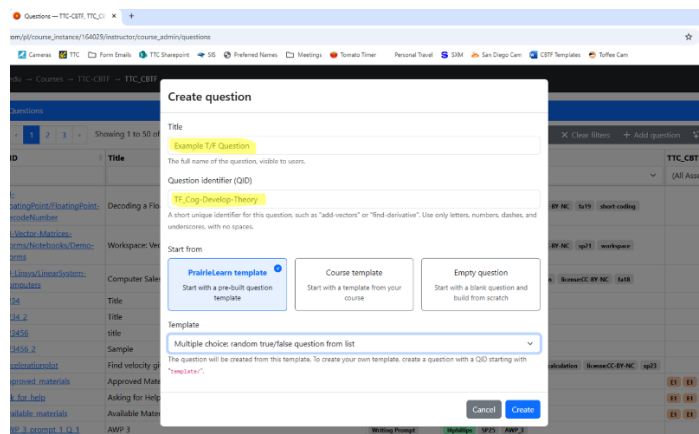
- First, sign into [PrairieLearn](#), and then click on the “Question” tab located in the black bar at the top of the screen.



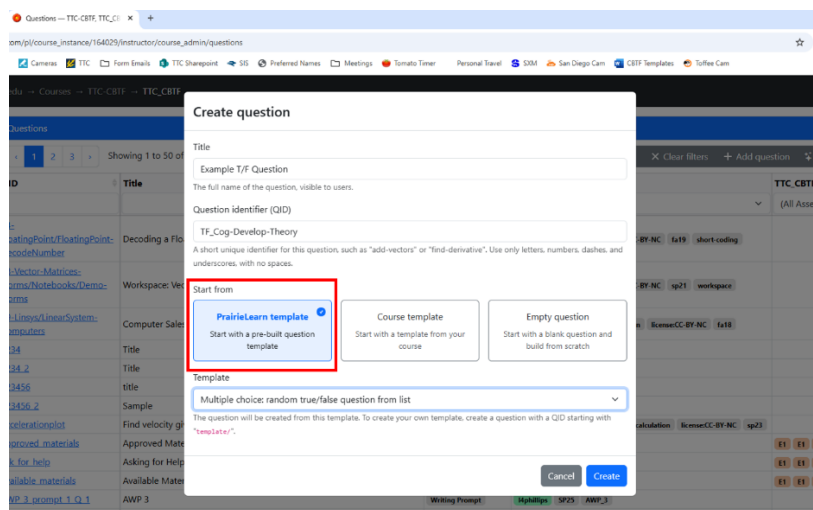
- Then, click the “+Add Question” button, under the blue bar on the far right of the screen.



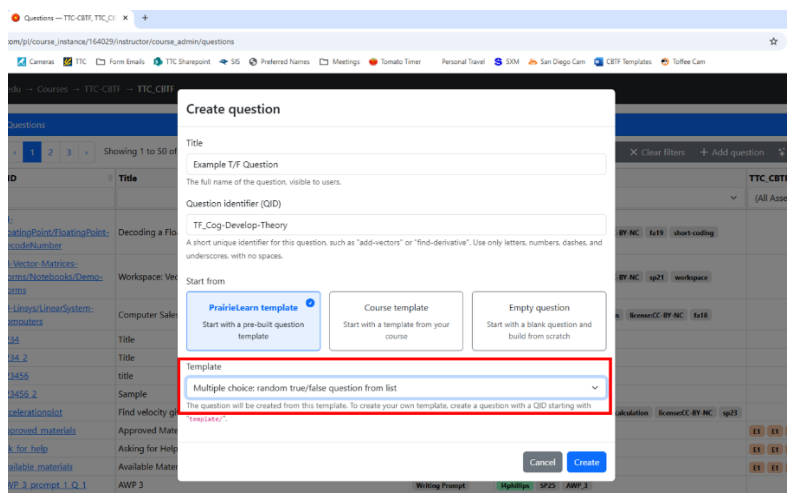
- Next, create a title and a unique identifier for your question. Remember to create a generic, standardized title that students will see. The **Question Identifier (QID)** should be recognizable to aid in assessment creation. The QID must have no spaces and only use letters, numbers, dashes, and underscores (e.g. “MC-business-principles” or “TF\_Cog-Develop-Theory”)



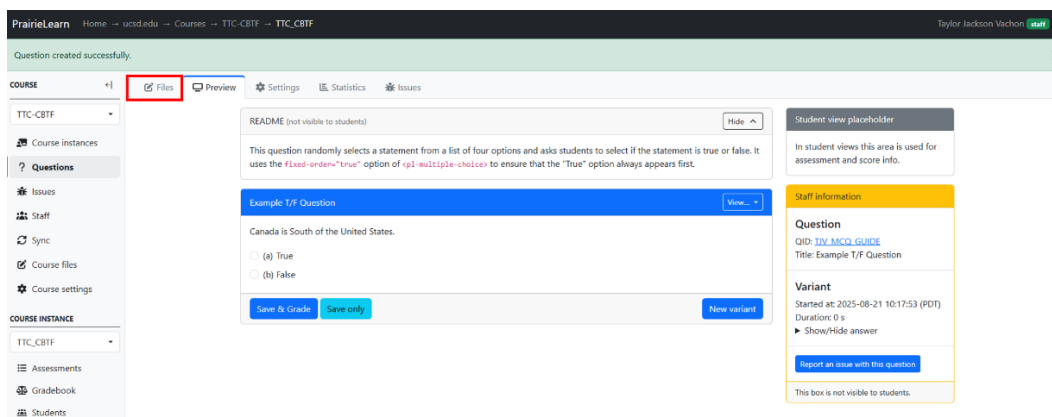
- Click "PrairieLearn template" under "Start from."



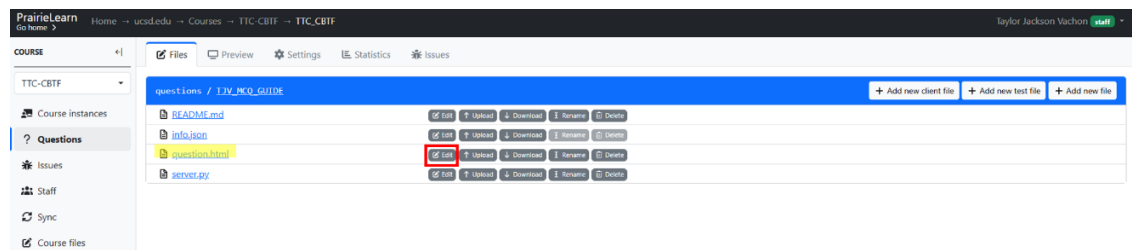
- Next, click the dropdown menu under "Template", and select "**Multiple choice: random true/false question from list**" and click create.



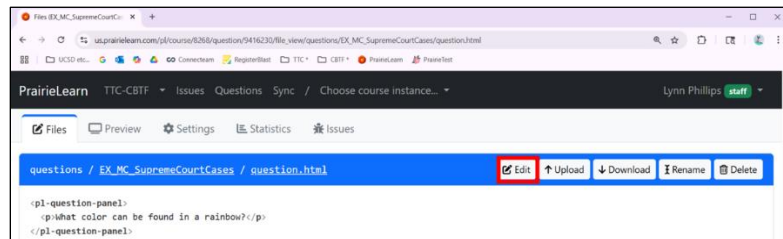
- After creation, the question starts on the "Preview" tab. Next click the "Files" tab to the left of the "Preview" tab on the upper left side of the screen.



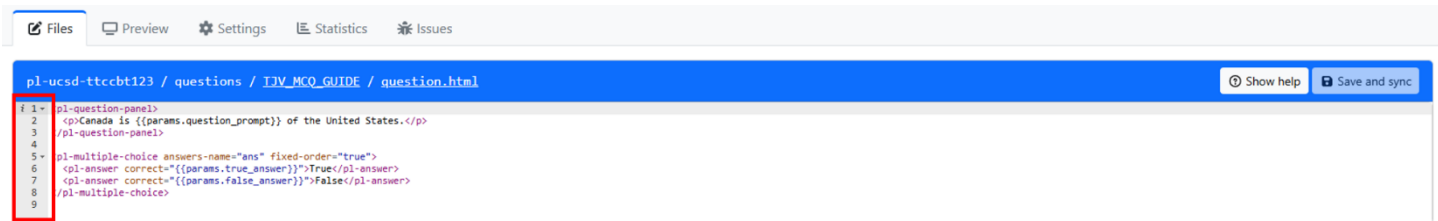
- The first file that needs to be edited is the “**question.html**” file. Click on the “Edit” button to the right of the question.html file.



If you click the “**question.html**” preview link on the left above, you can still access the code editor by clicking the “Edit” button on the right side of the blue bar.



- In the question editor window, the code elements are identified by color designations and each line is numbered on the left side of the screen:



## Editing the Question

After using the template to create your question, the question editor window will have the basic formatting necessary to create a multiple-choice question with 1 or more correct answers and 3 or more distractors.

### Glossary of Coding Elements & Terms

Code Element	Meaning
<code>&lt;pl-question-panel&gt;</code>	Opening code for the question panel (new section)
<code>&lt;/pl-question-panel&gt;</code>	Closing code for the question panel (endsection)
<code>&lt;p&gt;</code>	Opening code for a paragraph
<code>&lt;/p&gt;</code>	Closing code for a paragraph
<code>&lt;pl-multiple-choice answers-name="nameofchoiceshere" number-answers="4"&gt;</code>	Opening code for the Multiple-choice element that designates a name for choices and the number of answers that will be chosen. (e.g “number-answers="6">” will give 1 correct choice and 5 distractors)
<code>&lt;pl-answer correct="true"&gt;</code>	Opening code for the correct answers

</pl-answer>	Closing code for the correct answers
<pl-answer>	Opening code for the distractors
</pl-answer>	Closing code for the distractors
</pl-multiple-choice>	Closing code for the Multiple-choice element

- First, create your question stem. Note that `{{params.question_prompt}}` is the code that holds the place for the various options to appear. You will define these later. (*Helpful Keyboard Shortcuts: “ctrl+C” to copy and “ctrl+V” to paste*)
  - Another example here could be: UC San Diego is located in `{{params.question_prompt}}`. or `{{params.question_prompt}}` is a state that starts with the letter C.

```

1 <pl-question-panel>
2 <p>Canada is {{params.question_prompt}} of the United States.</p>
3 </pl-question-panel>
4
5 <pl-multiple-choice answers-name="ans" fixed-order="true">
6 <pl-answer correct="{{params.true_answer}}">True</pl-answer>
7 <pl-answer correct="{{params.false_answer}}">False</pl-answer>
8 </pl-multiple-choice>
9

```

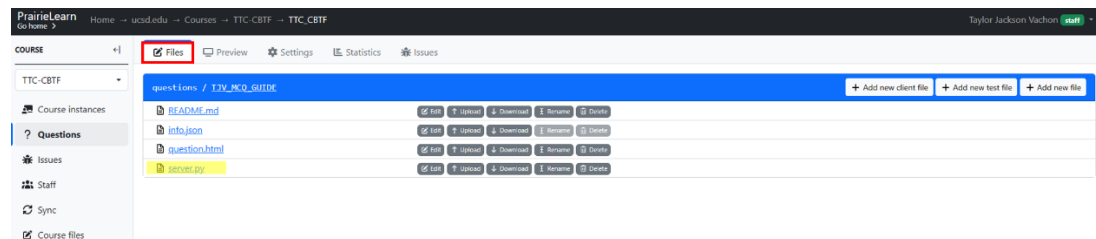
- Change the name for the choices (*optional*) and the number of total choices (*optional*). This could be useful if you’re teaching a world languages course and wish to change “True” to “Verdad” and “False” to “Falso.”

```

1 <pl-question-panel>
2 <p>Canada is {{params.question_prompt}} of the United States.</p>
3 </pl-question-panel>
4
5 <pl-multiple-choice answers-name="ans" fixed-order="true">
6 <pl-answer correct="{{params.true_answer}}">True</pl-answer>
7 <pl-answer correct="{{params.false_answer}}">False</pl-answer>
8 </pl-multiple-choice>
9

```

- Once you have made all wanted changes on this screen, click “Save and sync” in the upper right corner.
- Now, it’s time to establish your varying options. Click “Files” and then “server.py”



- Click “Edit” to alter the code.

```

1 import random
2
3
4 def generate(data):
5     # Create a list of question prompts and the corresponding answers.
6     scenarios = [
7         ("North", True),
8         ("South", False),
9         ("West", False),
10        ("East", False),
11    ]
12
13    # Select a random scenario.
14    scenario_statement, scenario_answer = random.choice(scenarios)
15
16    # Depending on the truth statement, set the appropriate prompt and answers.
17    data["params"]["question_prompt"] = scenario_statement
18    data["params"]["true_answer"] = scenario_answer
19    data["params"]["false_answer"] = not scenario_answer
20

```

- Decide how many True answers you will use and how many False answers you will use. Delete the remaining options shown. For this example, there are 3 True options, but only 1 false option. Only one of each is absolutely necessary.

```

1 import random
2
3
4 def generate(data):
5     # Create a list of question prompts and the corresponding answers.
6     scenarios = [
7         ("North", True),
8         ("South", False),
9         ("West", False),
10        ("East", False),
11    ]
12
13    # Select a random scenario.
14    scenario_statement, scenario_answer = random.choice(scenarios)
15
16    # Depending on the truth statement, set the appropriate prompt and answers.
17    data["params"]["question_prompt"] = scenario_statement
18    data["params"]["true_answer"] = scenario_answer
19    data["params"]["false_answer"] = not scenario_answer
20

```

- Edit your options. The text in quotes are the options that will be randomly inserted into your question. To the right of each option, you'll be able to denote each option as true or false. Edit as necessary.

```

("North", True),
("South", False),
("West", False),
("East", False),

```

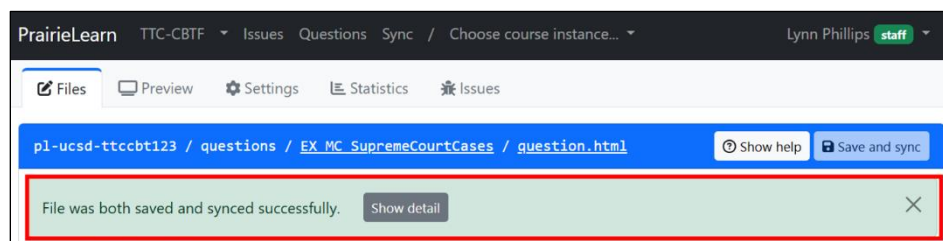
- Once all changes have been made, press the “Save and Sync” button in the blue bar.

```

1 import random
2
3
4 def generate(data):
5     # Create a list of question prompts and the corresponding answers.
6     scenarios = [
7         ("North", True),
8         ("South", False),
9         ("West", False),
10        ("East", False),
11    ]
12
13    # Select a random scenario.
14    scenario_statement, scenario_answer = random.choice(scenarios)
15
16    # Depending on the truth statement, set the appropriate prompt and answers.
17    data["params"]["question_prompt"] = scenario_statement
18    data["params"]["true_answer"] = scenario_answer
19    data["params"]["false_answer"] = not scenario_answer
20

```

- If everything is correct you will see this notification:



- Click the “Preview” tab to view your question.

Preview

Settings

Statistics

Issues

README (not visible to students)

Hide ^

This question randomly selects a statement from a list of four options and asks students to select if the statement is true or false. It uses the `fixed-order="true"` option of `<pl-multiple-choice>` to ensure that the "True" option always appears first.

Example T/F Question

View... ▾

Canada is North of the United States.

☐ (a) True

☐ (b) False

Save & Grade

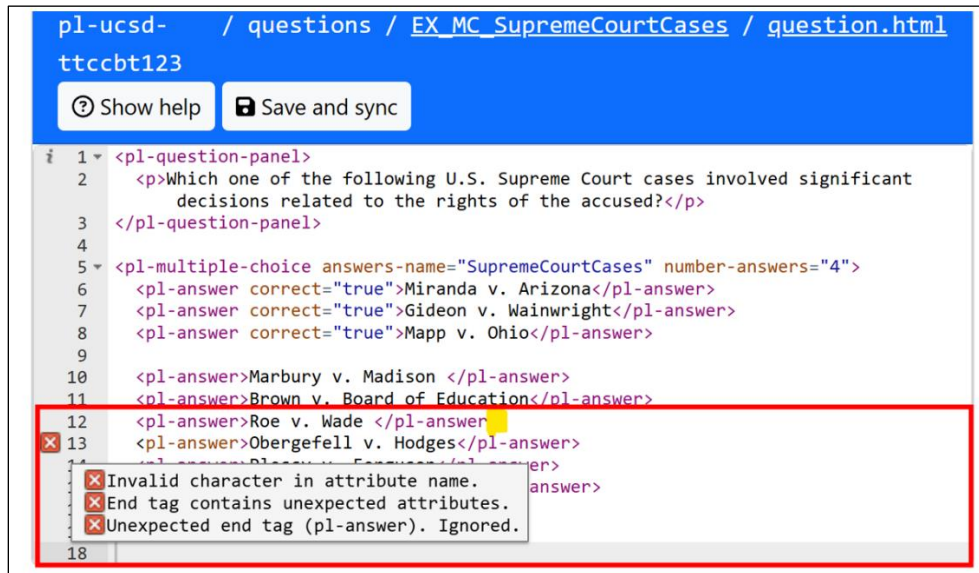
Save only

New variant

## Common Issues & Tips for Success

Small changes in the coding elements can cause issues and errors. Here are some common mistakes and tips for success.

- If you mistakenly delete a part of a code, a red X icon will appear next to the line where the issue is. Hovering over the icon will provide information regarding the issue. In this example, I deleted the ">" character from the end of line 12. Because part of the closing tag is missing, the system is reading the error in line 13. Replacing the missing character will fix the problem.



```
pl-ucsd- / questions / EX_MC_SupremeCourtCases / question.html
ttcibt123
[Show help] [Save and sync]

1 <pl-question-panel>
2 <p>Which one of the following U.S. Supreme Court cases involved significant
3 decisions related to the rights of the accused?</p>
4 </pl-question-panel>
5 <pl-multiple-choice answers-name="SupremeCourtCases" number-answers="4">
6 <pl-answer correct="true">Miranda v. Arizona</pl-answer>
7 <pl-answer correct="true">Gideon v. Wainwright</pl-answer>
8 <pl-answer correct="true">Mapp v. Ohio</pl-answer>
9
10 <pl-answer>Marbury v. Madison </pl-answer>
11 <pl-answer>Brown v. Board of Education</pl-answer>
12 <pl-answer>Roe v. Wade </pl-answer>
13 <pl-answer>Obergefell v. Hodges</pl-answer>
14 <pl-answer>Planned Parenthood v. Casey</pl-answer>
15 <pl-answer>Dobbs v. Jackson Women's Health Organization</pl-answer>
16 </pl-multiple-choice>
17
18
```

- Sometimes adding additional spaces or line breaks where you need to make changes can help visualize the different pieces of the code and help prevent accidental deletion of coding elements. For this example, I started a new line for each piece of information I modified for this question; this has no effect on the formatting or display of the student view of the question.

PrairieLearn

TTC-CBTF ▾

Issues

Questions

Sync /

Choose course instance... ▾

Lynn Phillips **staff** ▾

Files

Preview

Settings

Statistics

Issues

pl-ucsd-ttccbt123 / questions / EX\_MC\_SupremeCourtCases / question.html

Show help

Save and sync

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```
<pl-question-panel>
  <p>
    Which one of the following U.S. Supreme Court cases involved significant decisions related to the rights of the accused?
  </p>
</pl-question-panel>

<pl-multiple-choice answers-name="SupremeCourtCases" number-answers="4">
  <pl-answer correct="true">
    Miranda v. Arizona
  </pl-answer>
  <pl-answer correct="true">
    Gideon v. Wainwright
  </pl-answer>
  <pl-answer correct="true">
    Mapp v. Ohio
  </pl-answer>
  <pl-answer>
    Marbury v. Madison
  </pl-answer>
  <pl-answer>
    Brown v. Board of Education
  </pl-answer>
</pl-multiple-choice>
```