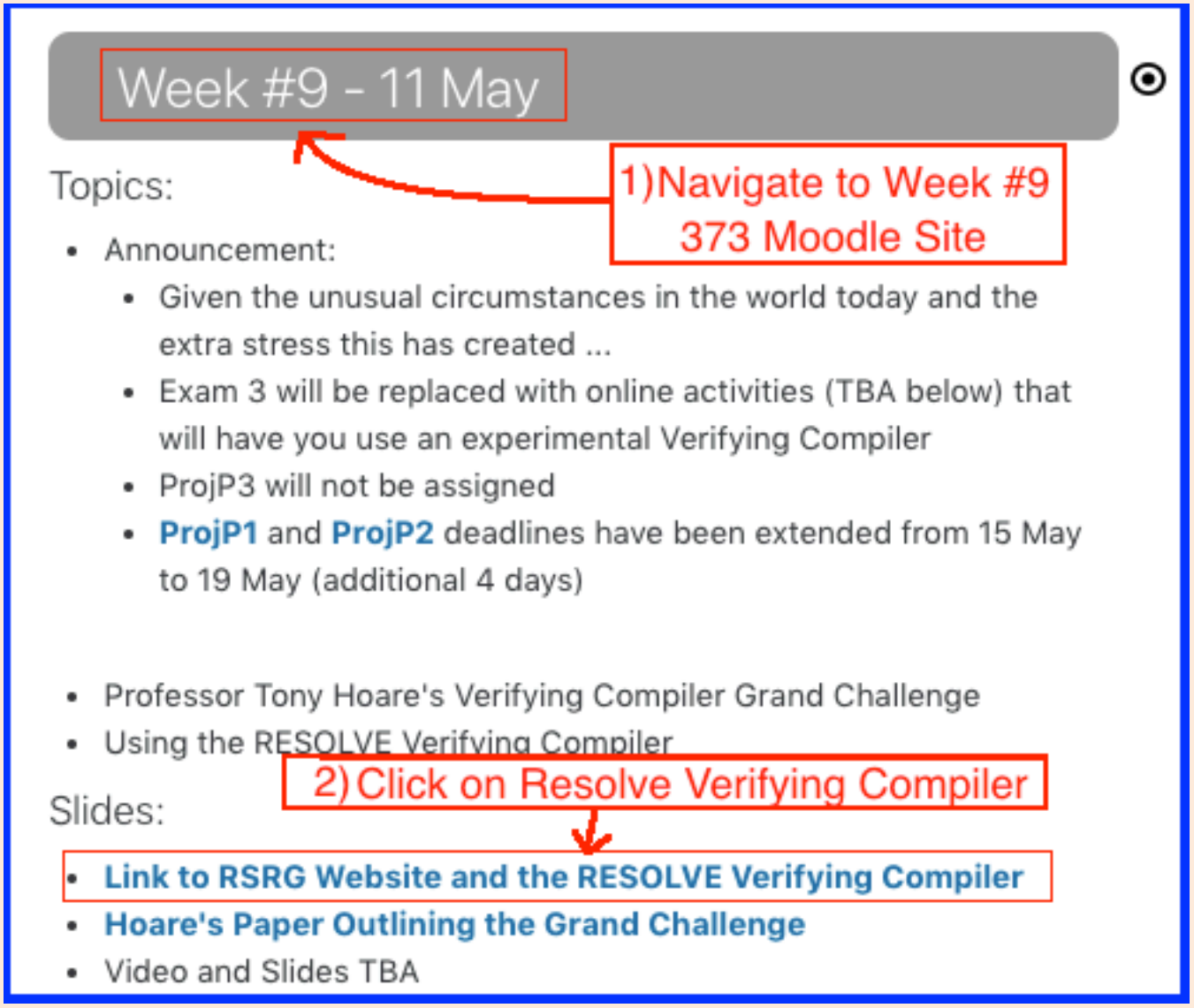
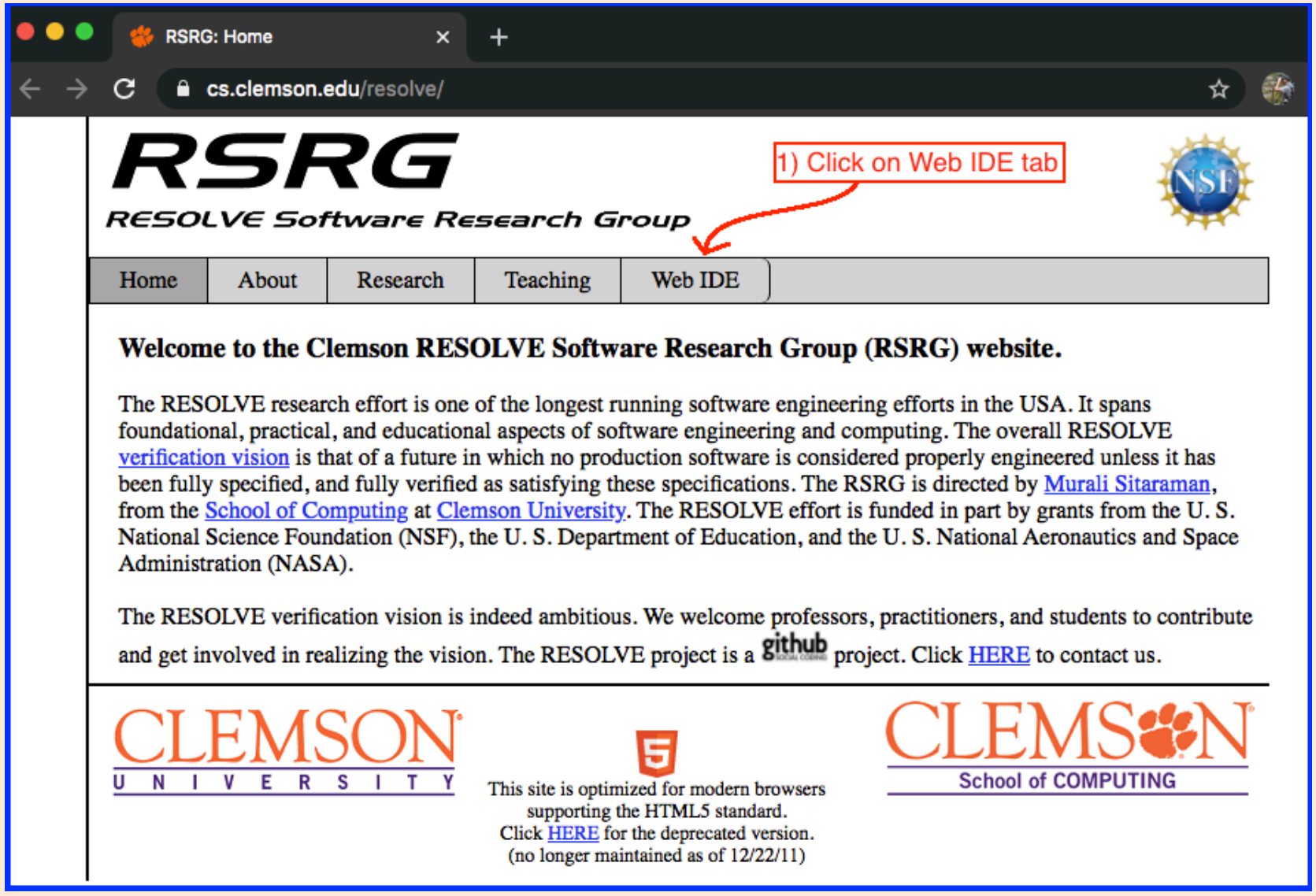
Getting Started with Clemson's Verifying Compiler

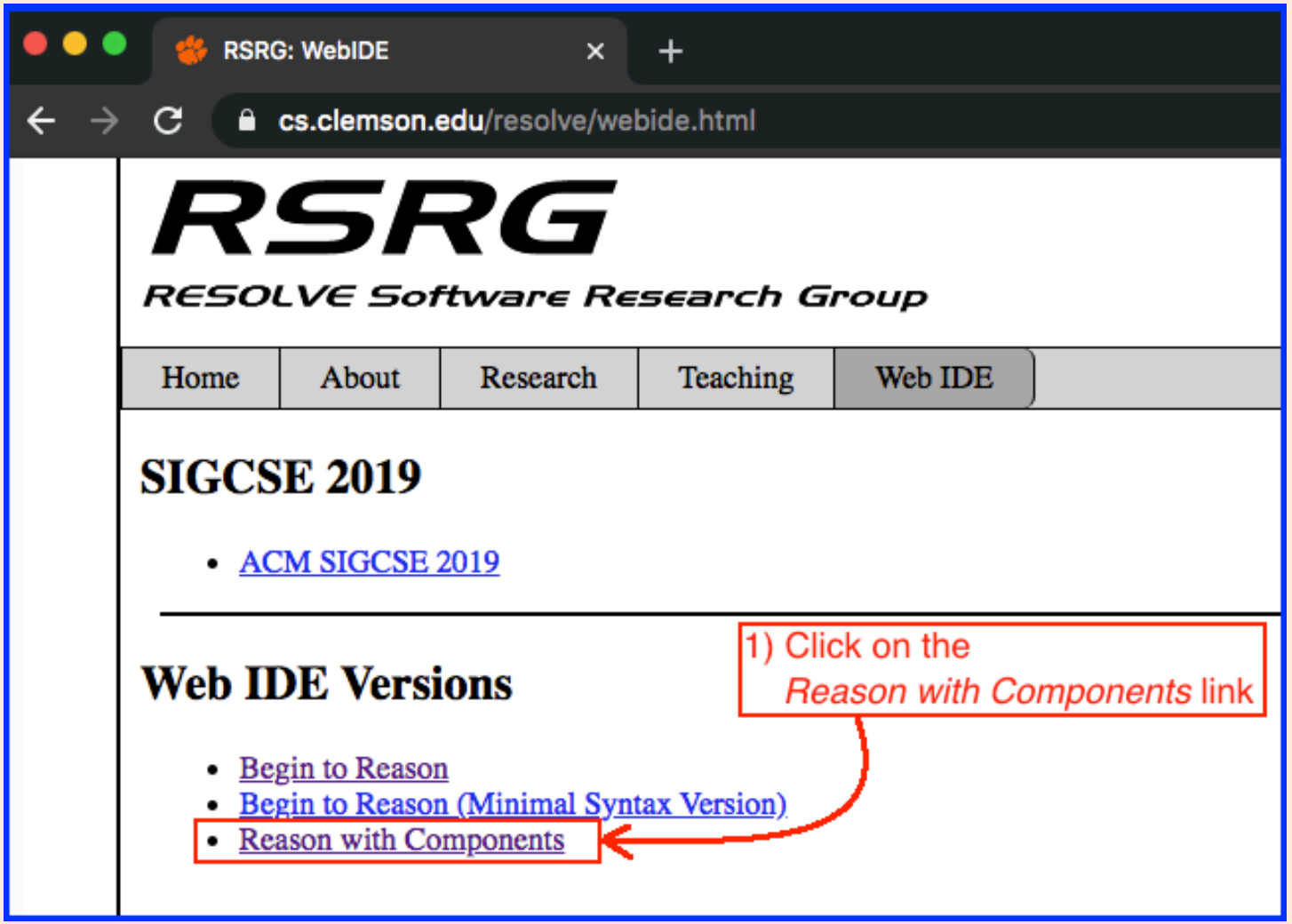
From the CSSE373 Moodle Site



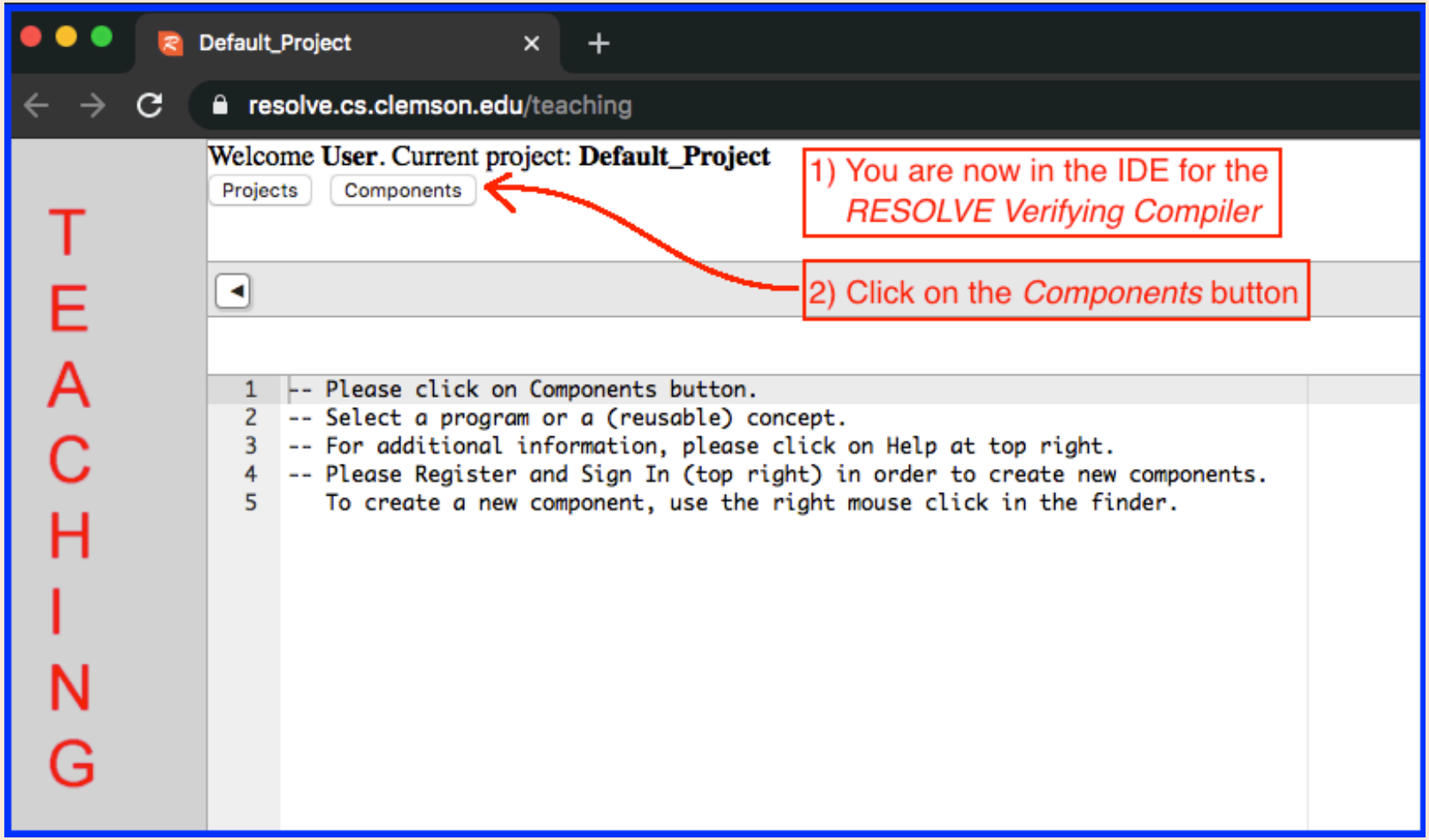
Takes You to RESOLVE Research Group's Landing Page



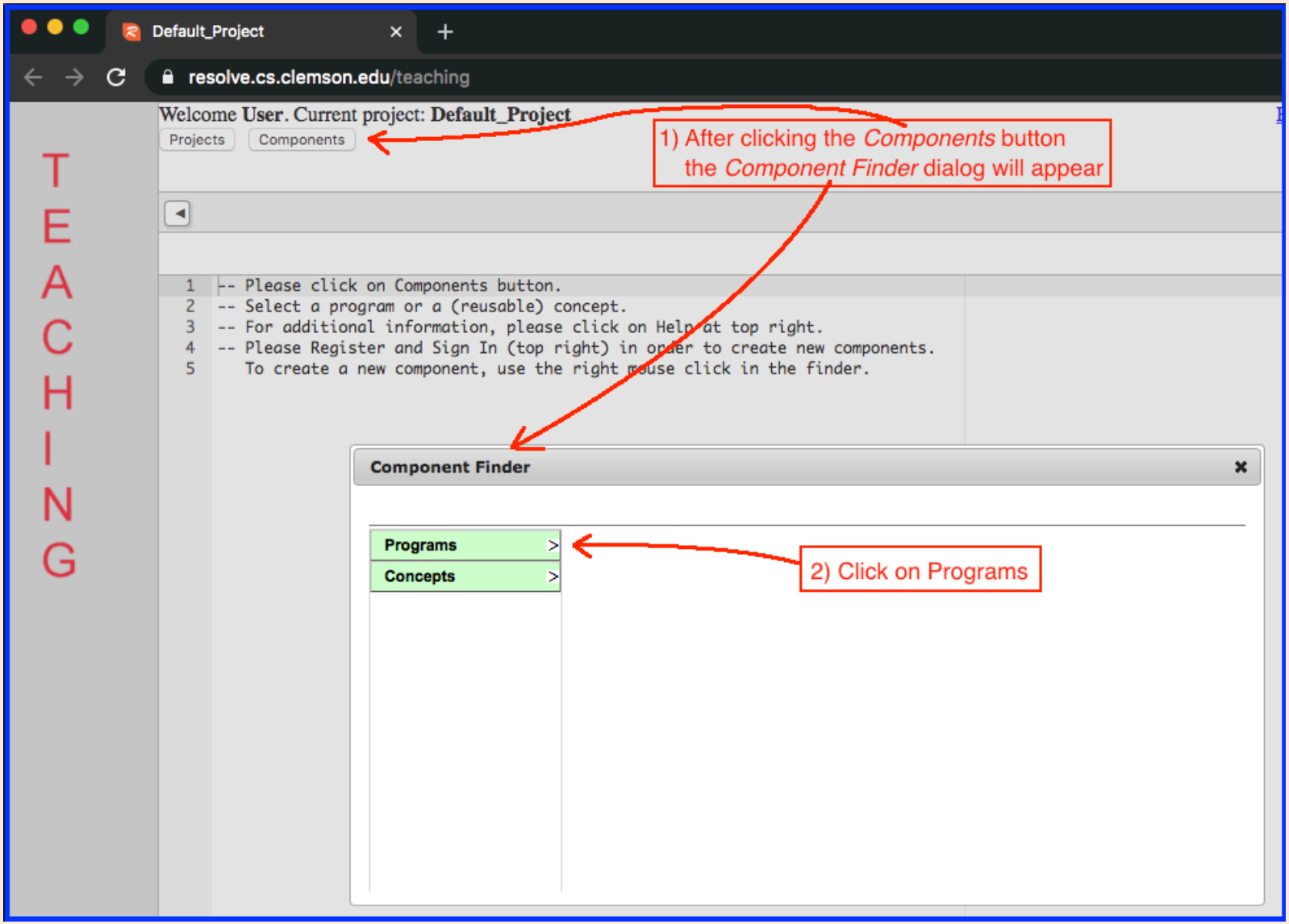
Now You Are on the Web IDE Page



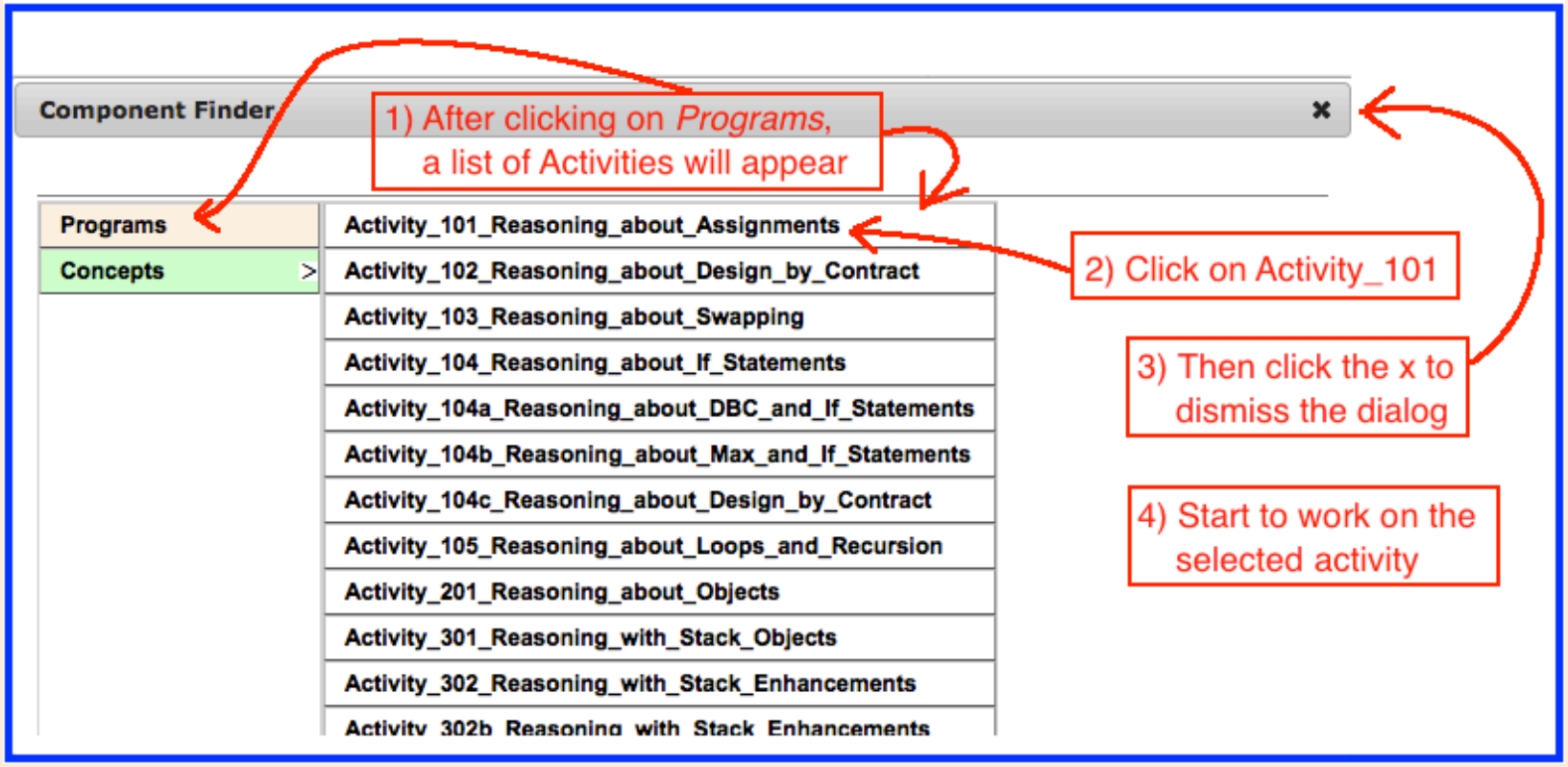
Now You Are in the RESOLVE Verifying Compiler



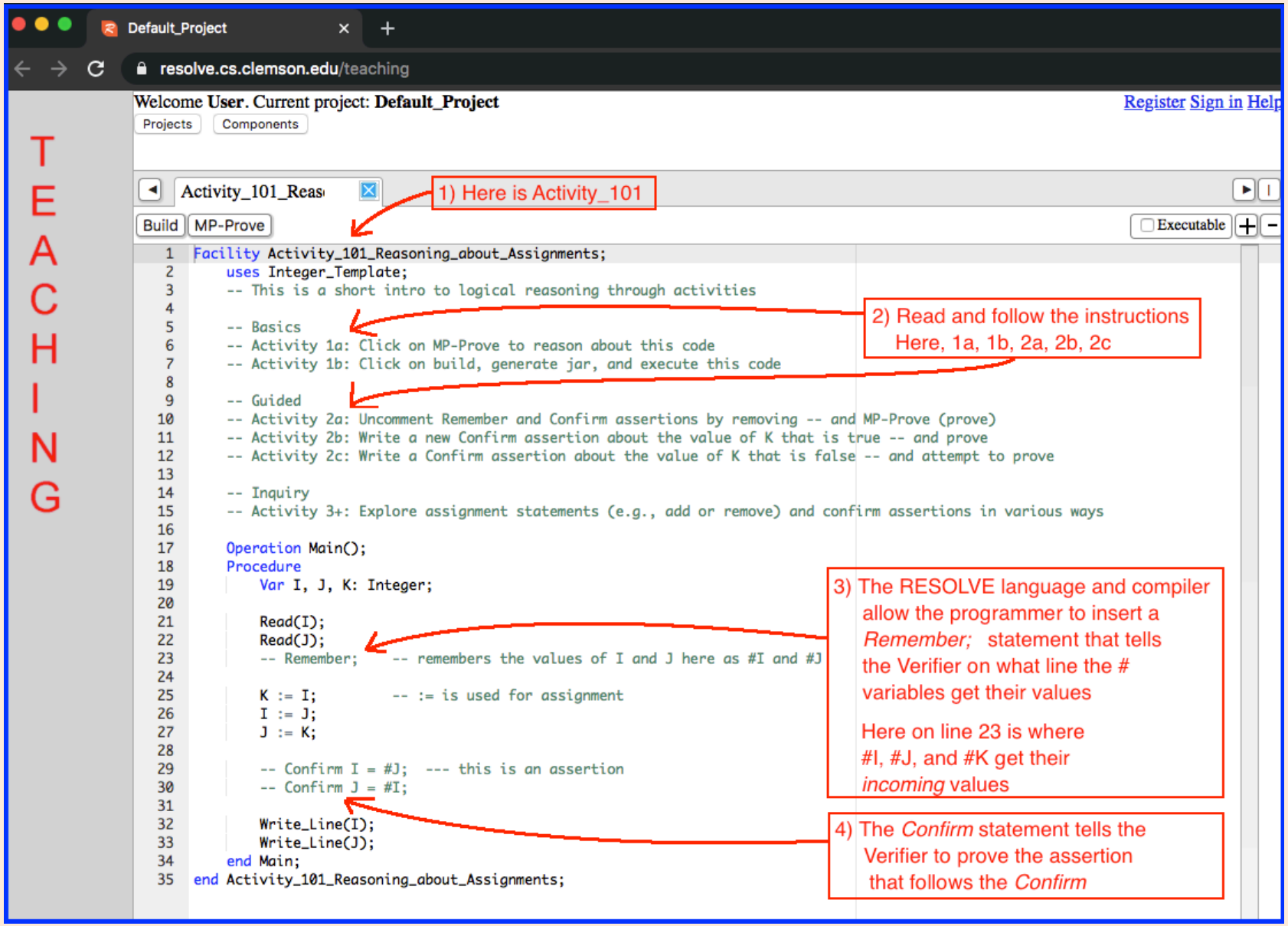
Now Bring Up the Component Finder Dialog

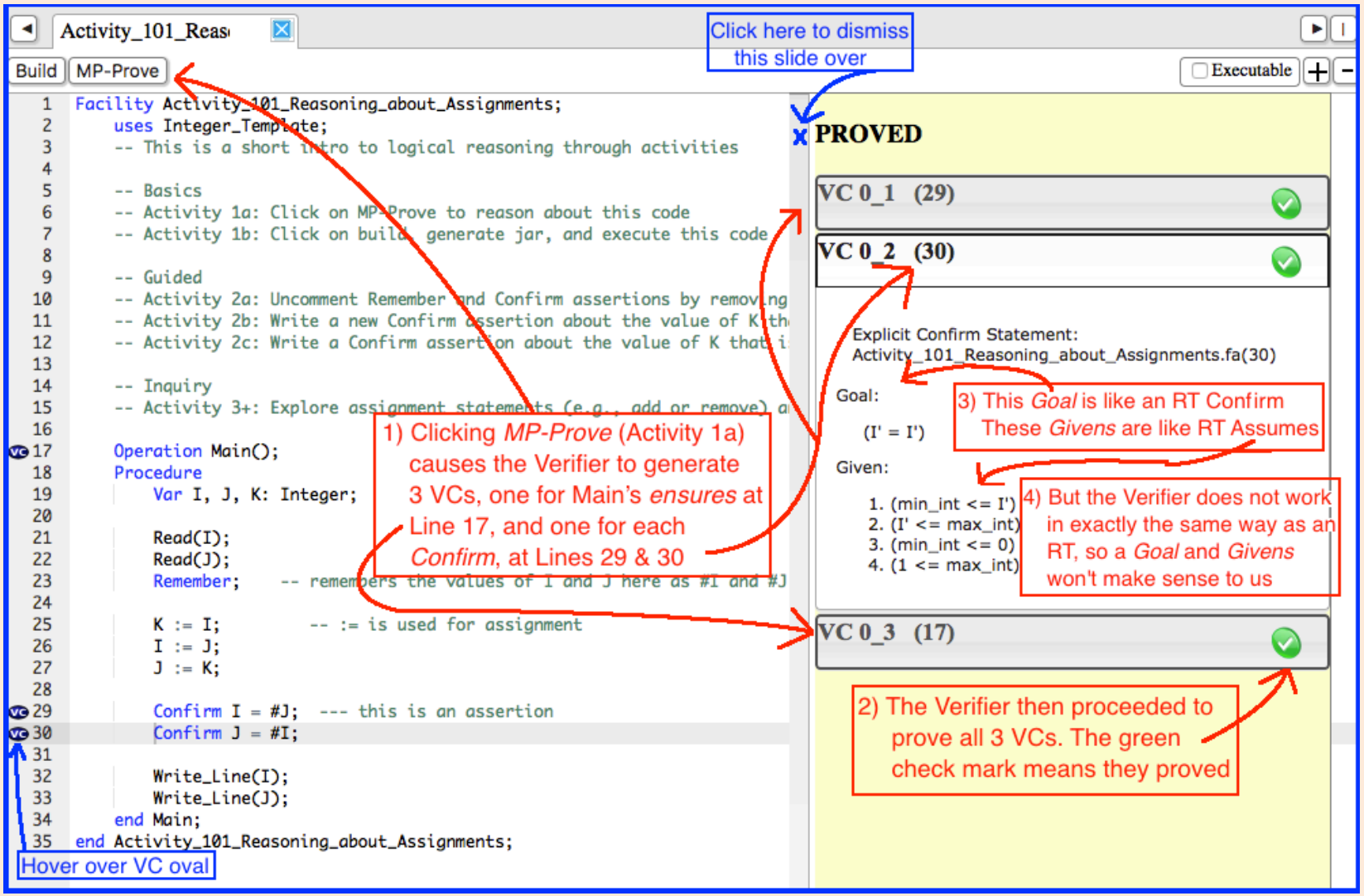


Now Select Activities to Work On



Here is Activity_101




```
1  Facility Activity_101_Reasoning_about_Assignments;
2      uses Integer_Template;
3      -- This is a short intro to logical reasoning through activities
4
5      -- Basics
6      -- Activity 1a: Click on MP-Prove to reason about this code
7      -- Activity 1b: Click on build, generate jar, and execute this code
8
9      -- Guided
10     -- Activity 2a: Uncomment Remember and Confirm assertions by removing -- and MP-Prove (prove)
11     -- Activity 2b: Write a new Confirm assertion about the value of K that is true -- and prove
12     -- Activity 2c: Write a Confirm assertion about the value of K that is false -- and attempt to prove
13
14     -- Inquiry
15     -- Activity 3+: Explore assignment statements (e.g., add or remove) and confirm assertions in various ways
16
17     Operation Main();
18     Procedure
19         Var I, J, K: Integer;
20
21         Read(I);
22         Read(J);
23         -- Remember;     -- remembers the values of I and J here as #I and #J
24
25         K := I;          -- := is used for assignment
26         I := J;
27         J := K;
28
29         -- Confirm I = #J;  --- this is an assertion
30         -- Confirm J = #I;
31
32         Write_Line(I);
33         Write_Line(J);
34     end Main;
35 end Activity_101_Reasoning_about_Assignments;
```

Here is the Verifier at Work