



USER'S



MANUAL



*University of North Alabama
Program Evaluation Tool
(UNA PET)*



CS 455, Spring 2017



Revisions

Version No.	Date	Editor	Revision Description
Version 1 Revision 1	April 13, 2017	Tyler Delano	Added title page and organized the structure of the document.
Version 1 Revision 2	April 18, 2017	Tyler Delano	Wrote sections 1.0 – 1.3. Stubbed out all others sections.
Version 1 Revision 3	April 23, 2017	Tyler Delano	Wrote sections 2.0 - 2.3. Wrote sections 3.0 – 3.1.3
Version 1 Revision 4	April 25, 2017	Tyler Delano	Updated the cover page. Wrote sections 3.1.4 – 3.4.3 Revised wording throughout manual.
Version 1 Revision 5	April 26, 2017	Tyler Delano	Revised wording and figures throughout to allow for clearer understanding. Added back-cover to manual. Revised wording throughout manual.
Version 1 Revision 6	April 27, 2017	Tyler Delano	Revised errors throughout.

USER'S MANUAL

TABLE OF CONTENTS

	<u>Page #</u>
1.0 General Information.....	3
1.1 Application Overview.....	3
1.2 Acronyms and Abbreviations.....	3
<u>1.2.1 UNA PET:</u>	3
<u>1.2.2 CSV:</u>	3
<u>1.2.3 SI:</u>	3
2.0 Getting started.....	7
2.1 Application Configuration.....	7
2.2 User Access Levels.....	7
<u>2.2.1 Administrator(s)</u>	7
<u>2.2.2 Instructor(s)</u>	7
<u>2.2.3 Supplemental Instructor(s)</u>	7
<u>2.2.4 Students</u>	7
3.0 Using The Application.....	9
<u>3.0.1 Login</u>	9
<u>3.0.2 Request New Password</u>	9
<u>3.0.3 Logout</u>	9
<u>3.0.4 Change Password</u>	9
3.1 Administrators.....	9
<u>3.1.1 Create/ Edit/ Delete Courses</u>	9
<u>3.1.2 Import CSV of Students</u>	10
<u>3.1.3 Create/ Edit/ Delete Users</u>	10
<u>3.1.4 Archive Courses</u>	11
<u>3.1.5 Backup Database</u>	11
3.2 Instructors.....	11
<u>3.2.1 Edit Course Description</u>	11
<u>3.2.2 Import CSV of Students</u>	12
<u>3.2.3 Create/ Edit/ Delete Users</u>	12
<u>3.2.4 Create/ Edit/ Delete Assignments</u>	13
<u>3.2.5 Assign/ Edit/ Delete Grades</u>	13
<u>3.2.6 Make Comments</u>	14
<u>3.2.7 View Grades/ Results</u>	15
<u>3.2.8 Export Grade Report</u>	15
<u>3.2.9 Export CSV of Students</u>	16
<u>3.2.10 Export Submissions</u>	16
<u>3.2.11 Download Archived Courses</u>	17
3.3 Supplemental Instructors.....	17
<u>3.3.1 View Results</u>	17
<u>3.3.2 Edit Test Cases</u>	17
<u>3.3.3 View/ Edit Grades</u>	18

3.4	Students	18
3.4.1	<u>Upload C++ Source Code</u>	18
3.4.2	<u>View Results</u>	19
3.4.3	<u>View Grades & Comments</u>	19

1.0 GENERAL INFORMATION

1.0 GENERAL INFORMATION

1.1 Application Overview

UNA PET is a web-based user application designed for program evaluation within the Computer Science Department at the University of North Alabama. Students have the ability to submit C++ source code files (.cpp files) for evaluation. Instructors have the ability to execute these files through the user interface against specified requirements that include the desired output and runtime. Instructors may also make comments and add grades that are viewable to students. Students are able to test programs against test cases set by instructors until the deadline for an assignment. UNA PET may be

used as an alternative method for instructors to grade programs that offers a built in compiler and output comparison tool.

1.2 Acronyms and Abbreviations

1.2.1 UNA PET:

The name of the tool; University of North Alabama Program Evaluation Tool; The user interface will be branded as such.

1.2.2 CSV:

Comma-separated values; file type that may be used.

1.2.3 SI:

Supplemental Instructor

2.0 GETTING STARTED

2.0 GETTING STARTED

The UNA PET is a web-based tool. Users of this tool will be required to have a compatible web browser and a reliable network connection.

2.1 Application Configuration

This application is designed to run on an OpenBSD machine running a modern web server (Apache, Nginx, etc.) and MariaDB. Please follow this link for help setting up these services:

<https://www.youtube.com/watch?v=JG8xv4LS7kM>

2.2 User Access Levels

This application has four user access levels: administrator, instructor, supplemental instructor, and student. Each user's abilities are described below and in further sections.

2.2.1 Administrator(s)

Administrators have the ability to login, logout, request a new password, change his/her password, import a CSV file containing student information, create/edit/delete courses, create/edit/delete users, archive courses, edit start and end dates for a course, and backup the database.

2.2.2 Instructor(s)

Instructor(s) have the ability to login, logout, request a new password, change his/her password, import a CSV file containing student information, export a CSV file containing student information, create/edit/delete users, create/edit/delete assignments, create/edit/delete grades for assignments, view submitted code, view grades/results, make comments, edit course description, edit start and end dates for an assignment, download archived courses, download .zip folder of assignment source code submissions, and export grade report.

2.2.3 Supplemental Instructor(s)

Supplemental instructor(s) have the ability to login, logout, request a new password, change his/her password, view student submitted code and results, edit test cases, and view/edit grades when flags are set to allow each action.

2.2.4 Students

Students will be able to login, logout, request a new password, change his/her password, upload C++ source code files (.cpp), view his/her uploaded source code, and view his/her grade/result.


3.0 USING THE APPLICATION

3.0 USING THE APPLICATION

This section details all actions within the application.

3.0.1 Login

1. Navigate to <http://cs-srv-02/>

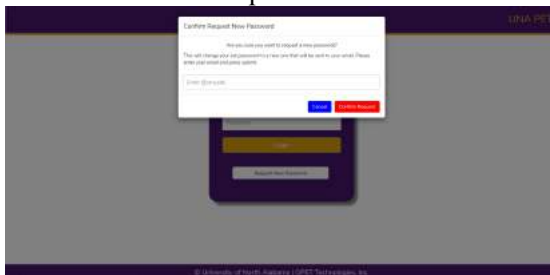


The UNA PET Login form is a purple box with a white background. It contains a 'Username' input field, a 'Password' input field, a yellow 'Login' button, and a 'Request New Password' button.

2. Enter your assigned username associated your UNA Portal account.
3. Enter your password.
4. Click → Login.

3.0.2 Request New Password

1. If password cannot be remembered: Click → Request New Password

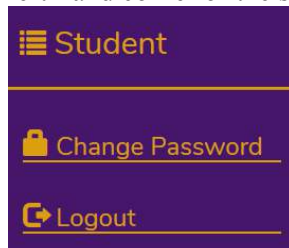


The UNA PET Request New Password form is a purple box with a white background. It contains a 'Email Address' input field, a 'Submit' button, and a 'Cancel' button. A small text box above the input field reads: 'If you cannot remember your password, you can request a new one. This will change your old password to a new one that will be sent to your email. Please enter your email address below.'

2. Enter a valid email and click submit.

3.0.3 Logout

1. Click the dropdown menu in the top left-hand corner of the screen.

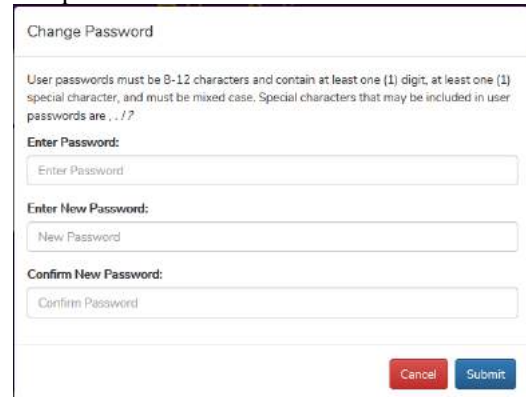


The UNA PET User Options dropdown menu is a purple box with a white background. It contains three options: 'Student', 'Change Password', and 'Logout', each with a corresponding icon.

2. Click → Logout

3.0.4 Change Password

1. Click the dropdown menu in the top left-hand corner of your screen.
2. Click → Change Password.
3. This screen will be displayed and prompt for current password and new password.



The UNA PET Change Password form is a white box with a purple border. It contains a 'Change Password' title, a text box explaining password requirements (8-12 characters, at least one digit, at least one special character, and must be mixed case), and three input fields: 'Enter Password:', 'Enter New Password:', and 'Confirm New Password:'. At the bottom right are 'Cancel' and 'Submit' buttons.

User passwords must be 8-12 characters and contain at least one (1) digit, at least one (1) special character, and must be mixed case. Special characters that may be included are , . ! ?

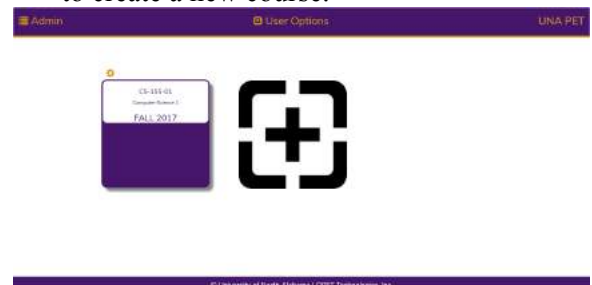
4. After changes have been made: Click → Submit

3.1 Administrators

3.1.1 Create/ Edit/ Delete Courses

Create Course

1. Click the plus button on the homepage to create a new course.



The UNA PET Admin page is a purple box with a white background. It contains a header with 'Admin', 'User Options', and 'UNA PET'. Below the header is a course card for 'CS-334-01' (Section Number 1) for 'Fall 2017'. To the right of the course card is a large black plus button. At the bottom is a footer with '© University of North Alabama | CSTT Technologies, Inc.'

Administrators will be prompted to enter the course number, section number,

instructor, and start and end date for the course.

2. After changes have been made: Click → Save Changes

Edit Course

1. Click the edit button above the desired course.
2. Click → Edit Course

3. Administrators are allowed to change information pertaining to course title and start/end date.

4. After changes have been made: Click → Save Changes

Delete Course

1. Click the edit button above the desired course.
2. Click → Delete
3. To remove the selected course permanently: Click → Delete

3.1.2 Import CSV of Students

1. Click → User Options
2. Click → Import Users

3. Click → Browse (Select a CSV file in the correct format for upload.)

4. Select a course from the dropdown menu to which the users will be added.
5. After a file has been selected: Click → Submit

3.1.3 Create/ Edit/ Delete Users

Create Users

1. Click → User Options
2. Click → Create User
3. Administrators will be prompted to enter name, email address, course, and privilege level.

Create a user

First Name:

Middle Initial:

Last Name:

Email address:

Select Course:

Privilege Level:

Submit

- After changes have been made: Click → Submit

Edit Users

- Click → User Options
- Click → Edit User



- Administrators are allowed to change information pertaining to name and privilege level in the field.

Edit User

First Name:

Middle Initial:

Last Name:

Privilege Level:

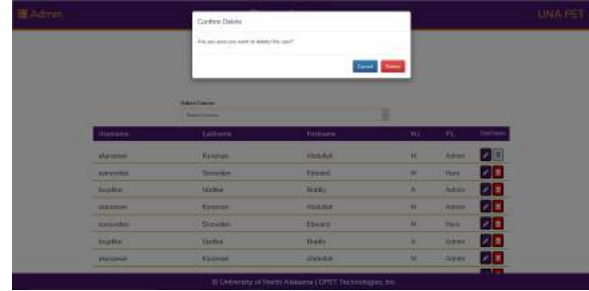
Cancel **Save changes**

- Click on the edit icon next to the user to be edited.
- After changes have been made: Click → Save Changes

Delete Users

- Click → User Options
- Click → Edit User

- Click on the delete button next to the user to be removed.



- To remove the selected user permanently: Click → Delete

3.1.4 Archive Courses

- Click the edit button above the course to be archived.
- Click → Archive
- Click → Yes

3.1.5 Backup Database

- Click the dropdown menu in the top left-hand corner of the screen.
- Click → Backup Database



3.2 Instructors

3.2.1 Edit Course Description

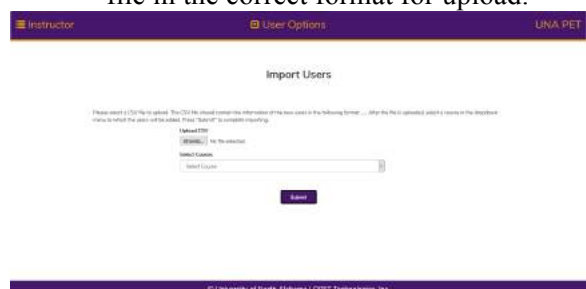
- Select the desired course from the homepage.
- Click the edit button above the course description text field.
- After changes have been made: Click → Save Changes

3.2.2 Import CSV of Students

1. Click → User Options
2. Click → Import Users



3. Click → Browse. Please select a CSV file in the correct format for upload.



4. Select a course from the dropdown menu to which the users will be added.
5. After a file has been uploaded: Click → Submit

3.2.3 Create/ Edit/ Delete Users

Create Users

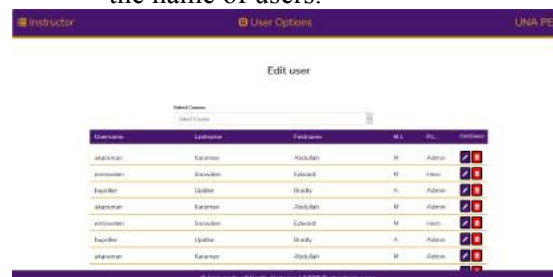
1. Click → User Options
2. Click → Create User
3. Instructors will be prompted to enter name, email address, course, and privilege level.



4. After changes have been made: Click → Submit

Edit Users

1. Click → User Options
2. Click → Edit User
3. Instructors are allowed to change edit the name of users.



4. Click on the edit icon next to the user to be edited.

Edit User

First Name:

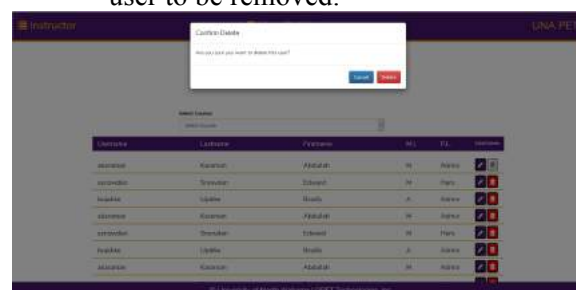
Middle Initial:

Last Name:

5. After changes have been made: Click → Save Changes

Delete Users

1. Click → User Options
2. Click → Edit User
3. Click on the delete button next to the user to be removed.



4. To remove the selected user permanently: Click → Delete

3.2.4 Create/ Edit/ Delete Assignments

Create Assignment

1. Select the desired course from the homepage.



2. Click → Assignments



3. Click the plus button to add a new assignment.
4. Instructors will be prompted to enter name, open date, end date, test cases, points possible, and the run-time constraint.

Create Assignment

Name:
Enter Assignment Name

Open Date: Due Date:

Upload Test Cases
Browse... No file selected.

Points Possible:
 0.0

Run-Time constraint:
 In milliseconds

Cancel Submit

5. After changes have been made: Click → Submit

Edit Assignment

1. Select the desired course from the homepage.
2. Click → Assignments

3. Click the edit button next to the assignment to be edited.

Edit Assignment

Name:
Enter Assignment Name

Open Date: Due Date:

Upload Test Cases
Browse... No file selected.

Points Possible:
 0.0

Run-Time constraint:
 In milliseconds

Cancel Save Changes

4. After changes have been made: Click → Submit

Delete Assignment

1. Select the desired course from the homepage.
2. Click → Assignments
3. Click the delete button next to the assignment to be removed.



4. To remove the selected assignment permanently: Click → Delete

3.2.5 Assign/ Edit/ Delete Grades

Assign Grade

1. Select the desired course from the homepage.



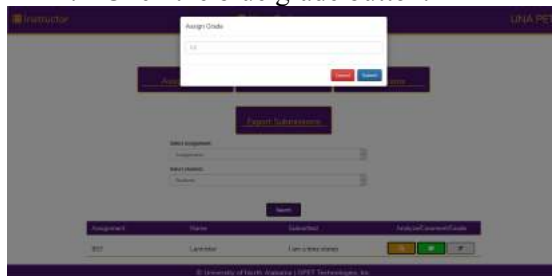
2. Click → Submissions



3. Select the assignment and the student to assign a grade for from the dropdown menu. Click → Search.



4. Click the blue grade button.



5. Enter the grade for the assignment. Click → Submit

Edit Grade

1. Select the desired course from the homepage.
2. Click → Grades
3. Click the edit button next to the assignment grade to be edited.



4. After changes have been made: Click → Save Changes

Delete Grade

1. Select the desired course from the homepage.
2. Click → Grades
3. Click the delete button next to the assignment grade to be removed.



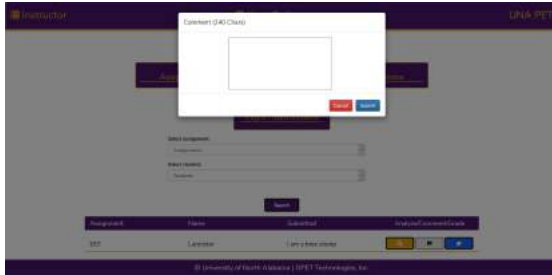
4. To remove the selected grade permanently: Click → Delete

3.2.6 Make Comments

1. Select the desired course from the homepage.
2. Click → Submissions
3. Select the assignment and the student to assign a comment for from the dropdown menu. Click → Search



4. Click the green comment button.



5. Enter the comment for the assignment.
Click → Submit

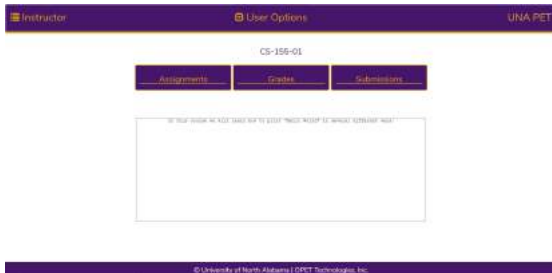
3.2.7 View Grades/ Results

View Grades

1. Select the desired course from the homepage.



2. Click → Grades



3. View grades from all assignments.



View Results

1. Select the desired course from the homepage.



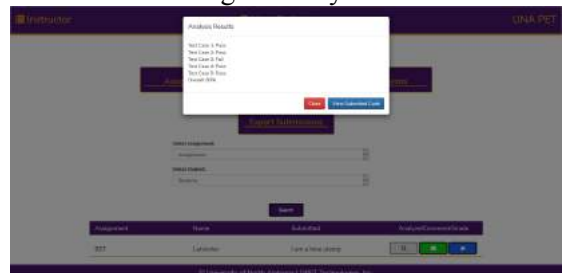
2. Click → Submissions



3. Select the assignment and student to assign grade for from the dropdown menu. Click → Search



4. Click the gold analyze button.



5. To view submitted code: Click → View Submitted Code

3.2.8 Export Grade Report

1. Select the desired course from the homepage.



2. Click → Grades



3. Click → Export Grade Report

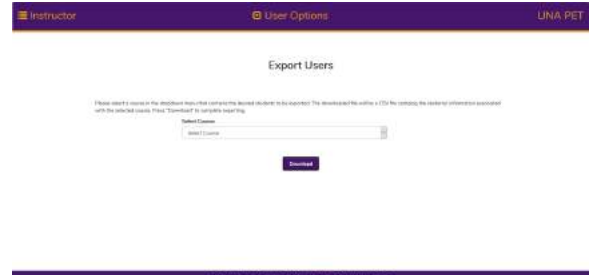


3.2.9 Export CSV of Students

1. Click → User Options
2. Click → Export Users



3. Select a course from the dropdown menu.



4. Click → Download

3.2.10 Export Submissions

1. Select the desired course from the homepage.



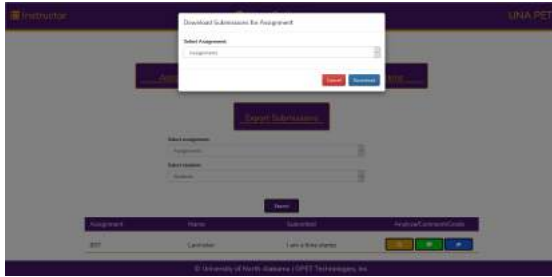
2. Click → Submissions



3. Click → Export Submissions



4. Select the assignment from the dropdown menu: Click → Download



3.2.11 Download Archived Courses

1. Click the dropdown menu in the top left-hand corner of the screen.
2. Click → Download Courses



3. Select a course from the dropdown menu to download.



4. Click → Download

3.3 Supplemental Instructors

All of the following are dependent upon permissions set by an administrator.

3.3.1 View Results

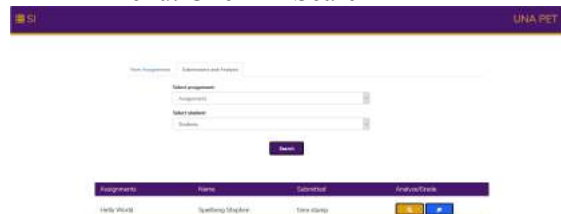
1. Select the desired course from the homepage.



2. Click → Submission & Analysis



3. Select the assignment and the student to view results for from the dropdown menu. Click → Search



4. Click the gold analyze button.



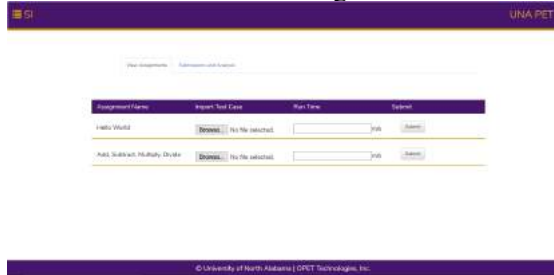
5. To view submitted code: Click → View Submitted Code.

3.3.2 Edit Test Cases

1. Select the desired course from the homepage.



2. Click → View Assignments



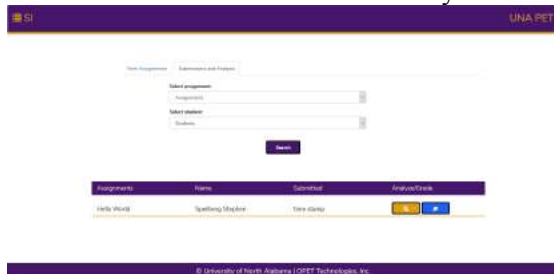
3. To upload new test cases, click → Browse.
4. Enter the runtime constraint. Click → Submit

3.3.3 View/ Edit Grades

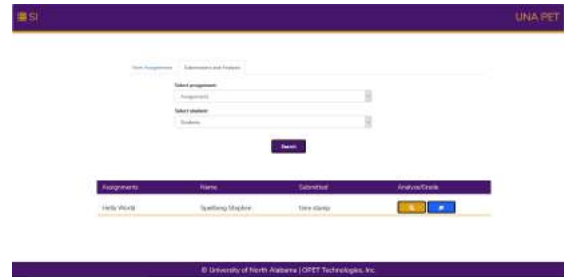
1. Select the desired course from the homepage.



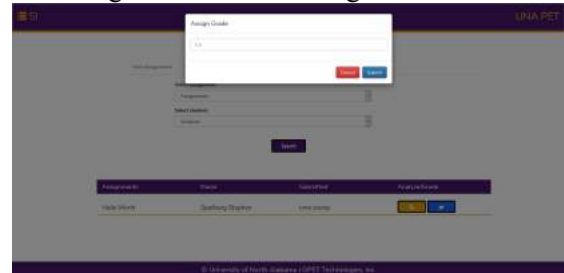
2. Click → Submission & Analysis



3. Select the assignment and the student to assign a grade for from the dropdown menu. Click → Search



4. To edit a grade or view an assigned grade click the blue grade button.

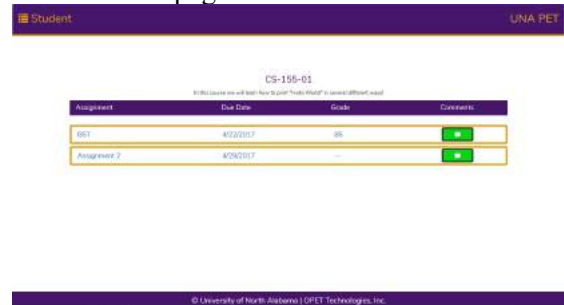


5. Enter the grade for the assignment. Click → Submit

3.4 Students

3.4.1 Upload C++ Source Code

1. Click the desired assignment from the homepage.



2. Click → Submit Assignment



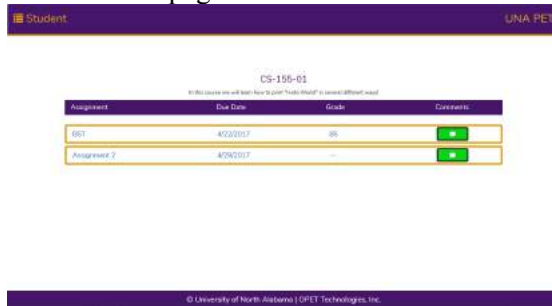
3. Click → Browse



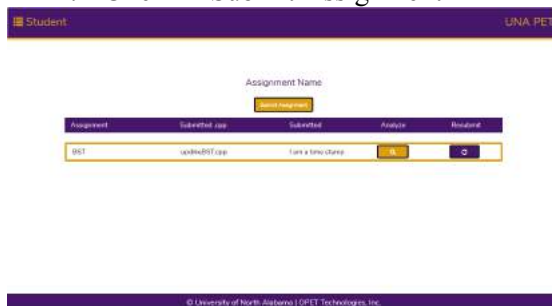
4. Click → Submit

3.4.2 View Results

1. Click the desired assignment from the homepage.



2. Click → Submit Assignment



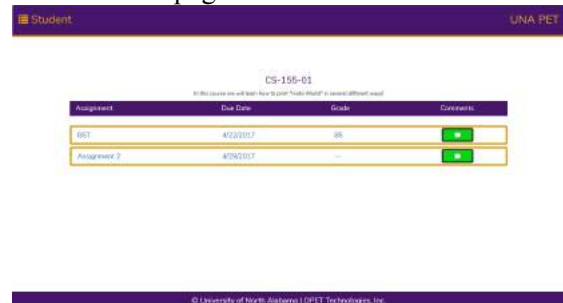
3. Click the gold analyze button.



4. To view submitted code: Click → View Submitted Code.

3.4.3 View Grades & Comments

1. Click the desired assignment from the homepage.



2. Click the green comment button to view instructor comments.



Team Members: Tyler Delano, Eileen Drass, Todd Gibson, Hannah Hopkins, Nathan Huckaba, Abdullah Karaman, Brad Lanford, Evan Lott, Alex Updike

1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26