

## CS163 Test Plan

**Develop the test plan:** For each member function that you plan to write, think about how to test it – what flow of control exists in the member function and how would you test out all conditions:

Test Case(s)	Expected Result	Verified? (yes/no)
<code>list_manager::list_manager(0)</code>	don't create any lists	
<code>list_manager::list_manager(5)</code>	create 5 lists	
<code>list_manager::add_item(NULL)</code>	return false, don't attempt to add	
<code>list_manager::add_item(Project struct)</code>	return true, add item to list	
<code>list_manager::remove_item(name)</code>	return true, remove item	
<code>list_manager::remove_item(NULL)</code>	return false don't attempt to remove	
<code>list_manager::remove_item(non-existent)</code>	return false don't attempt to remove	
<code>list_manager::display_priority(1)</code>	return true, print priority 1	
<code>list_manager::display_priority(0)</code>	return false, don't print	
<code>list_manager::display_priority(non-existent)</code>	return false, don't print	
<code>list_manager::display_all() → no lists</code>	return false, don't print	
<code>list_manager::display_all() → more than 1 list</code>	return true, print all items	
<code>project_list::add_item(NULL)</code>	return false, don't add	
<code>project_list::add_item(Project struct)</code>	return true, add item	
<code>project_list::display_all() → initialized list</code>	return true, print b/c list	
<code>project_list::display_all() → empty list</code>	return false, don't print	
<code>project_list::remove_item(NULL)</code>	return false, don't remove	
<code>project_list::remove_item(non-existent)</code>	return false, don't remove	
<code>project_list::remove_item(name)</code>	return true, remove item	

**Verify correctness:** Using the above test plan, create a test program that tests the interactions of all functions together.