**CIT 261 – Week 05 Notes**

Testing and Debugging

* 3 types of errors
  + System Error – there is a problem with the program interacting with the system or external devices
  + Programmer Error – there is a problem with the program, faulty logic or typo
  + User Error – user has entered bad data
* Exception
  + Error that produces an return value that can be used by the program to deal with the error.
* Stack Traces
  + The sequence of functions or methods leading up to the error.
* Warnings
  + An error that doesn’t cause the program to crash
* Strict Mode
  + Produces more errors and warnings
  + Prohibits use of depreciated features
  + To use Strict Mode, add the following to the first line
    - ‘use strict’;
  + Can be used inside a function. Then it applies only to the function. Make the first line in function
* Linting Tools
  + Checks for good programming practices
* Feature Detection
  + Used to determine what browser is being used
  + Browser sniffing is not recommended
* Trusty Alert
  + Discouraged to use for debugging
* Console
  + Used to log information out for the user to view
* Debugging Tools
  + Most browsers have debugging tools built in.
  + debugger is the keyword – creates a breakpoint in the code. You can hover over variables to see their current values
* Error Objects
  + Created when an exception occurs
* Throwing Exceptions
  + Allows you to deal with an error promptly
  + Custom messages can be created stating what happened
* Exception Handling
  + Try
  + Catch
  + Finally
* Tests

Questions for Weekly Call:

1. Explain the last ‘use strict’ example on page 356.
   1. (function() {

‘use strict’;

// All your code would go inside this function

}());