**Review and Overview**

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**Skills List - Review**

[Skills List - Review](https://dmacc.blackboard.com/webapps/blackboard/content/listContent.jsp?course_id=_105776_1&content_id=_8026721_1)

First thing is to brush up on the concepts of CIS 169 including the following which will be key concepts to have down pat before we start:

* + Concepts of user input validation (although the syntax will be different the concepts are the same)
  + All of those style things like giving everything meaningful names, not bug chunks of blank lines, etc.
  + Decision making, [if statements](https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdocs.microsoft.com%2Fen-us%2Fdotnet%2Fcsharp%2Flanguage-reference%2Fkeywords%2Fif-else&data=02%7C01%7Cmeruse%40dmacc.edu%7C6c7b7dc66f764f0cb3af08d7faddae68%7Ce91e8e9401b54e3699301436f67ce779%7C0%7C0%7C637253702331201988&sdata=Np9r6WejSJhiGXfbQs7seFjQ8oXh44s1ByzTJvg0Kag%3D&reserved=0), [switch statements](https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdocs.microsoft.com%2Fen-us%2Fdotnet%2Fcsharp%2Flanguage-reference%2Fkeywords%2Fswitch&data=02%7C01%7Cmeruse%40dmacc.edu%7C6c7b7dc66f764f0cb3af08d7faddae68%7Ce91e8e9401b54e3699301436f67ce779%7C0%7C0%7C637253702331201988&sdata=x8AHpytjz4GJIda7OIBv4Cds%2FKlcDmNl378v0cak4ME%3D&reserved=0), etc.
  + Do you like your universe stringy or loopy? In physics it is stringy, but in programming we prefer loops [for](https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdocs.microsoft.com%2Fen-us%2Fdotnet%2Fcsharp%2Flanguage-reference%2Fkeywords%2Ffor&data=02%7C01%7Cmeruse%40dmacc.edu%7C6c7b7dc66f764f0cb3af08d7faddae68%7Ce91e8e9401b54e3699301436f67ce779%7C0%7C0%7C637253702331211981&sdata=y%2Fzt7%2FLJ5Uw%2BC4kWSoXLerefkaRWwu%2FTt1vUaQ3lGq0%3D&reserved=0), [while](https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdocs.microsoft.com%2Fen-us%2Fdotnet%2Fcsharp%2Flanguage-reference%2Fkeywords%2Fwhile&data=02%7C01%7Cmeruse%40dmacc.edu%7C6c7b7dc66f764f0cb3af08d7faddae68%7Ce91e8e9401b54e3699301436f67ce779%7C0%7C0%7C637253702331211981&sdata=lDw3sfW2PtXaCjl32t1fBlewfy6iMfPO%2FBynqlXOXZ8%3D&reserved=0), [do-while](https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdocs.microsoft.com%2Fen-us%2Fdotnet%2Fcsharp%2Flanguage-reference%2Fkeywords%2Fdo&data=02%7C01%7Cmeruse%40dmacc.edu%7C6c7b7dc66f764f0cb3af08d7faddae68%7Ce91e8e9401b54e3699301436f67ce779%7C0%7C0%7C637253702331221975&sdata=fFWKa8bqOl0%2BwvBxXbuIw%2FB4FzJWLnKOih1vE%2BJDdjM%3D&reserved=0), and a new one...
    - foreach [https://docs.microsoft.com/en-us/dotnet/csharp/language-reference/keywords/foreach-in](https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdocs.microsoft.com%2Fen-us%2Fdotnet%2Fcsharp%2Flanguage-reference%2Fkeywords%2Fforeach-in&data=02%7C01%7Cmeruse%40dmacc.edu%7C6c7b7dc66f764f0cb3af08d7faddae68%7Ce91e8e9401b54e3699301436f67ce779%7C0%7C0%7C637253702331221975&sdata=a29D8hiVEjoDdZBGbVP0Erlpn6BN2ox2hs4tzzSmgyo%3D&reserved=0)
  + The concepts of classes and building module code with a single method/class having a single responsibility, this will become paramount.
    - [https://stackify.com/solid-design-principles/](https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fstackify.com%2Fsolid-design-principles%2F&data=02%7C01%7Cmeruse%40dmacc.edu%7C6c7b7dc66f764f0cb3af08d7faddae68%7Ce91e8e9401b54e3699301436f67ce779%7C0%7C0%7C637253702331231975&sdata=AUFA4NCjfzKtlUe52%2Fq65Z4H8oKGbi83t0wMbDLYS4U%3D&reserved=0)
  + Remember arrays and lists but we are mostly going to focus on Lists and other [collections](https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdocs.microsoft.com%2Fen-us%2Fdotnet%2Fcsharp%2Fprogramming-guide%2Fconcepts%2Fcollections&data=02%7C01%7Cmeruse%40dmacc.edu%7C6c7b7dc66f764f0cb3af08d7faddae68%7Ce91e8e9401b54e3699301436f67ce779%7C0%7C0%7C637253702331231975&sdata=FwlSjD5QjXWGn0gUzctt5UQlob2GXT0dd1Z9ACWS%2Fu8%3D&reserved=0)
  + Having a good handle on writing SQL statements will also be very helpful:
    - There are three lessons linked [here](https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdocs.microsoft.com%2Fen-us%2Fsql%2Ft-sql%2Ftutorial-writing-transact-sql-statements%3Fview%3Dsql-server-ver15&data=02%7C01%7Cmeruse%40dmacc.edu%7C6c7b7dc66f764f0cb3af08d7faddae68%7Ce91e8e9401b54e3699301436f67ce779%7C0%7C0%7C637253702331231975&sdata=ciyj1r062zK0i8mt6EA6B0mAYhgR2cN1ifoU9ZyKJjE%3D&reserved=0) I suggest going through them to brush up

Now a few things to get geared up for advanced and help you hit the ground running when class starts in a couple weeks:

* + Make sure you are sharp on your debugging skills, this is advanced C# so I will be expecting you to come to me having performed debugging steps and having the information gained ready when you need help.
    - Debugging javascript: [https://youtu.be/szCE2LuoYLE](https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fyoutu.be%2FszCE2LuoYLE&data=02%7C01%7Cmeruse%40dmacc.edu%7C6c7b7dc66f764f0cb3af08d7faddae68%7Ce91e8e9401b54e3699301436f67ce779%7C0%7C0%7C637253702331241963&sdata=sfrqrfdNsX249Z1dLGHmT9glb%2FfFXZnaraA6akTHPEA%3D&reserved=0)
    - Debugging .net core: [https://youtu.be/feWeInify18](https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fyoutu.be%2FfeWeInify18&data=02%7C01%7Cmeruse%40dmacc.edu%7C6c7b7dc66f764f0cb3af08d7faddae68%7Ce91e8e9401b54e3699301436f67ce779%7C0%7C0%7C637253702331241963&sdata=ezM7HcXkfJt4idwi7QluaZxInFNCRsLqBXwMY7FsVuQ%3D&reserved=0)
  + Lastly make sure you give Unit testing a good look over as well because you will be expected to unit test 100% of your business logic in your final projects. (It's not as bad as it sounds )
    - The book we have uses xUnit here is a beginner [video](https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fyoutu.be%2FZh6Usyi2CzQ&data=02%7C01%7Cmeruse%40dmacc.edu%7C6c7b7dc66f764f0cb3af08d7faddae68%7Ce91e8e9401b54e3699301436f67ce779%7C0%7C0%7C637253702331251956&sdata=o5YrQfBnsf5TTcUKrs7Awjbs2vdAjt4GLwrhdEhTNvM%3D&reserved=0)

[**Decision-if**](https://docs.microsoft.com/en-us/dotnet/csharp/language-reference/keywords/if-else)

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[**Decision-switch**](https://docs.microsoft.com/en-us/dotnet/csharp/language-reference/keywords/switch)

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[**Loops-for**](https://docs.microsoft.com/en-us/dotnet/csharp/language-reference/keywords/for)

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[**Loops-while**](https://docs.microsoft.com/en-us/dotnet/csharp/language-reference/keywords/while)

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[**Loops-do while**](https://docs.microsoft.com/en-us/dotnet/csharp/language-reference/keywords/do)

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[**Collections**](https://docs.microsoft.com/en-us/dotnet/csharp/programming-guide/concepts/collections)

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[**Looping-foreach**](https://docs.microsoft.com/en-us/dotnet/csharp/language-reference/keywords/foreach-in)

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[**Solid Design Principles**](https://stackify.com/solid-design-principles/)

[[](javascript:markReviewed('_8026740_1'))Mark Reviewed](javascript:markReviewed('_8026740_1'))

[**Database-SQL**](https://docs.microsoft.com/en-us/sql/t-sql/tutorial-writing-transact-sql-statements?view=sql-server-ver15)

[[](javascript:markReviewed('_8026741_1'))Mark Reviewed](javascript:markReviewed('_8026741_1'))

[**Debugging JavaScript for .NET CORE**](https://www.youtube.com/watch?v=szCE2LuoYLE&feature=youtu.be)

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[**Debugging--Basics for .NET Core**](https://www.youtube.com/watch?v=feWeInify18&feature=youtu.be)

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[**Unit Testing with xUnit**](https://www.youtube.com/watch?v=Zh6Usyi2CzQ&feature=youtu.be)

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