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| **Date Assigned: 1/29/16** | **Date Due: 2/2/16** |
| **Unit:** Language Basics | **Turn In List:** **1. This document** |
| *“I will understand and implement date/time features of my language.”* | |

**Title: It’s a Date**

**Content Objectives:** Students will properly use their language date/time features to make comparisons and calculations.

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| **Starter Activity** |
| How do you print the current full date and time in your language? |

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| **Assignment:** |
| Students will use the following websites and internet searches to complete the table below:  Java: <http://www.tutorialspoint.com/java/java_date_time.htm> Note the use of millis!  C++: <http://www.tutorialspoint.com/cplusplus/cpp_date_time.htm>  Python: <http://www.tutorialspoint.com/python/python_date_time.htm>  C#: <https://msdn.microsoft.com/en-us/library/system.datetime.now(v=vs.110).aspx>  C++ and Python: note the use of a struct to handle individual elements of the date/time! |

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| **Include Sample Code or Explanation for the following Concepts Below (copy and paste lines from editor)** | |
| Code to print current time only: | time\_t time(time\_t\*time); |
| Code to print current date as: Day Month Year | char\*ctime(time\_t8time); |
| Code to format date as: YYYY/MM/DD | tm |
| Code to convert (cast)current date/time to string | char\* dt |

Psuedocode an app that asks for the user’s birthdate and calculates the age in millenniums, centuries, decades, years, months, days, hours, minutes, seconds.

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| ask for year mount and day for birth separately  get the current time and find the amount of seconds passed from the date of birth to current time. Divide the total seconds by 31536000 to find the years lived and then I will divide the total seconds by 86400 to find the days lived. To find the months lived I will multiply the years lived by 12. |
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Code the app that calculates the above psuedocode (note: depending on your language, you may need to ask for day, month and year separately and set each value to a global variable…) Consider adding functionality to ask for two dates and calculate the difference between them.

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