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| **SEMESTER** | | | **Spring** | **BSCS-5A** | | **2022** |
| **TITLE OF PROJECT** | | | | | | |
| **OneSol Compiler** | | | | | | |
| **Group Members** | | | | | | |
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| **What is a Compiler** | | | | | | |
| A compiler is a special program that translates a programming language's [source code](https://www.techtarget.com/searchapparchitecture/definition/source-code) into machine code, bytecode or another programming language. The source code is typically written in a high-level, human-readable language such as [Java](https://www.theserverside.com/definition/Java) or [C++](https://www.techtarget.com/searchdatamanagement/definition/C).  A programmer writes the source code in a code editor or an integrated development environment ([IDE](https://www.techtarget.com/searchsoftwarequality/definition/integrated-development-environment)) that includes an editor, saving the source code to one or more text files. A compiler that supports the source programming language reads the files, analyzes the code, and translates it into a format suitable for the target platform. | | | | | | |
| **Proposed Project** | | | | | | |
| In this project we have made a compiler similar to C++ using C++ language, all necessary steps are followed. First the input is passed through the lexical analyzer where it is tokenized and then passed on to a syntax analyzer to look for syntax errors and we will ensure whether it follows all rules and is semantically correct.  The main objective of this project is   * To create a compiler similar to that of C++. Because of existing systems, we can easily understand the ideas of the compiler phases. * If the input matches the rules the compiler should run it.   Targeted Audience Beginners someone who is newbie to coding | | | | | | |
| **TEAM PROFILE** | | | | | | |
| ***SYED SHAHEER HASSAN:***   * **Qualifications:** HSC (Pre-engineering) from Govt. degree college For Men Nazimabad, Karachi (UNDERGRADUATE) * **Qualities/Strengths**: * Programming, graphic designer, disciplined, team-player, communication ability, time-management and strategic planner   ***KAMAL KUMAR:***   * **Qualifications:** * HSC from Govt. Degree College Boys & Girls Majeed SRE III, Stadium Road, Karachi. (UNDERGRADUATE) * **Qualities/Strengths**: * Programming, Website developer, Communication ability, Technical advisor   ***MOHAMMAD HAMMAD AHMAD:***   * **Qualifications:** * HSC from Caspian College, Karachi. (UNDERGRADUATE) * **Qualities/Strengths**: * Mobile app developer, Documentation in charge, Disciplined | | | | | | |