



<b>COMPILE C++ FILE</b>	
<b>ACTORS</b> <ul style="list-style-type: none"> <li>• User</li> <li>• Compilation Module</li> </ul>	<b>REQUIREMENT</b> FR_12 – The system must compile C++ files directly from the editor.
<b>DESCRIPTION</b> This use case describes how a user compiles a C++ source file using the built-in functionality of the editor. The system uses a predefined C++ compiler and displays any compilation errors or success messages within the interface. The system has a built-in compiler setting, though they may be changed by the user	
<b>PRE-CONDITIONS</b> <ul style="list-style-type: none"> <li>• A C++ file must be open and saved.</li> <li>• The file must have a valid name and extension (e.g., .cpp).</li> </ul>	
<b>NORMAL FLOW</b> <ol style="list-style-type: none"> <li>1. The user clicks the “Compile” button or selects “Compile” from the menu.</li> <li>2. The system identifies the active C++ file and its path.</li> <li>3. The system invokes the compiler with the appropriate flags.</li> <li>4. The system captures the output of the compilation process.</li> <li>5. If successful, the system indicates compilation success.</li> </ol>	
<b>ALTERNATIVE FLOW</b> <ol style="list-style-type: none"> <li>1. If the file is not saved: <ol style="list-style-type: none"> <li>1.1. The system saves it automatically and then compiles the code.</li> </ol> </li> <li>2. If an error occurs during compilation: <ol style="list-style-type: none"> <li>2.1. The system will stop the compilation process.</li> <li>2.2. The error which caused the compilation to stop will be shown to the user.</li> </ol> </li> </ol>	
<b>POST-CONDITIONS</b> <ul style="list-style-type: none"> <li>• A compiled executable is generated (if successful).</li> <li>• The user is informed about the status of the compilation.</li> </ul>	
<b>NOTES</b> <ul style="list-style-type: none"> <li>• Compiler paths and flags should be configurable in system settings.</li> <li>• The system should allow compilation from keyboard shortcuts as well.</li> </ul>	