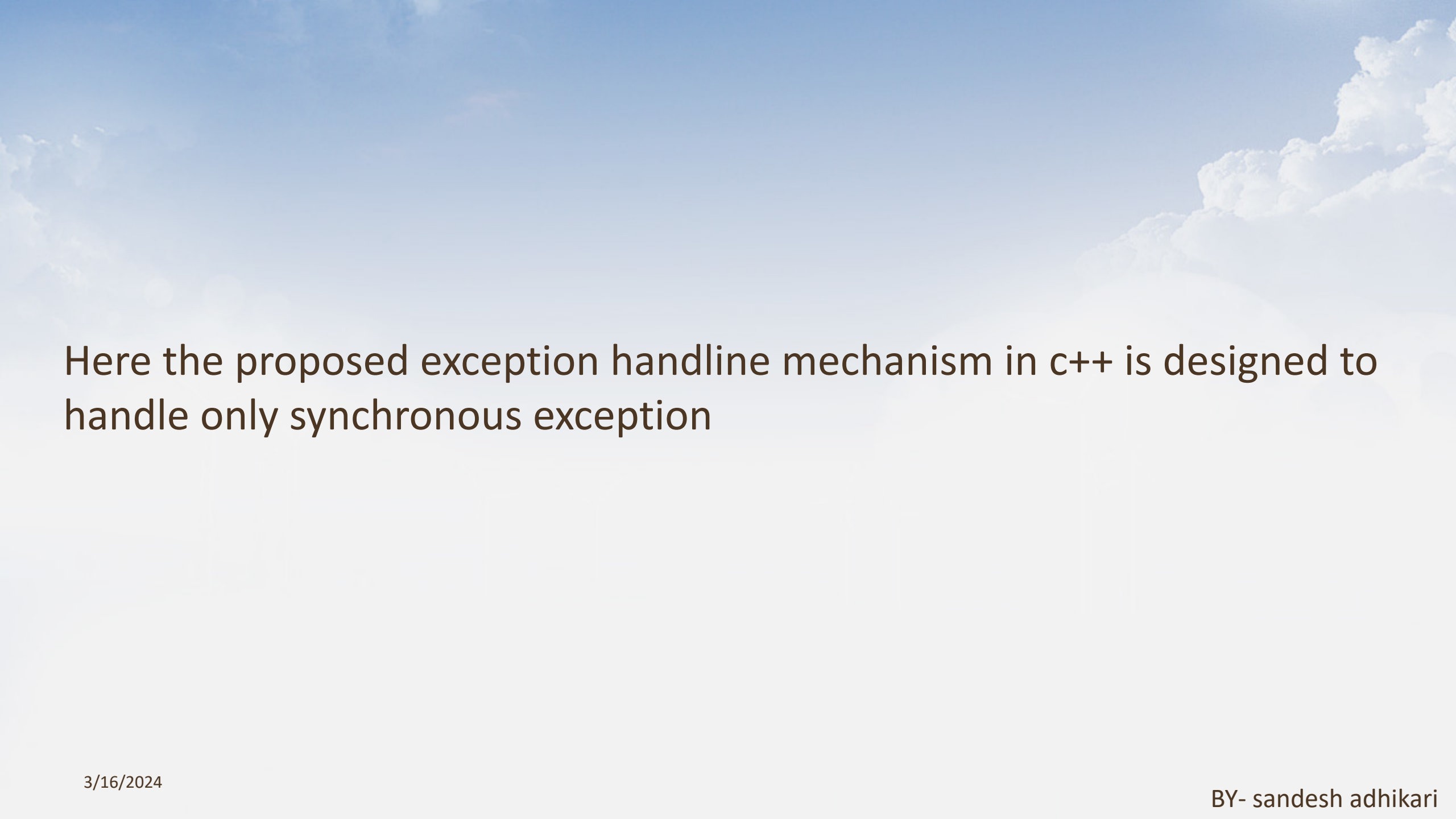


# Exception Handling

The run time error that may arise during the normal execution of the program is known as exception. example Division by zero, trying to access the array out of bound, memory overflow, keyboard interrupt etc

# Types of Exception

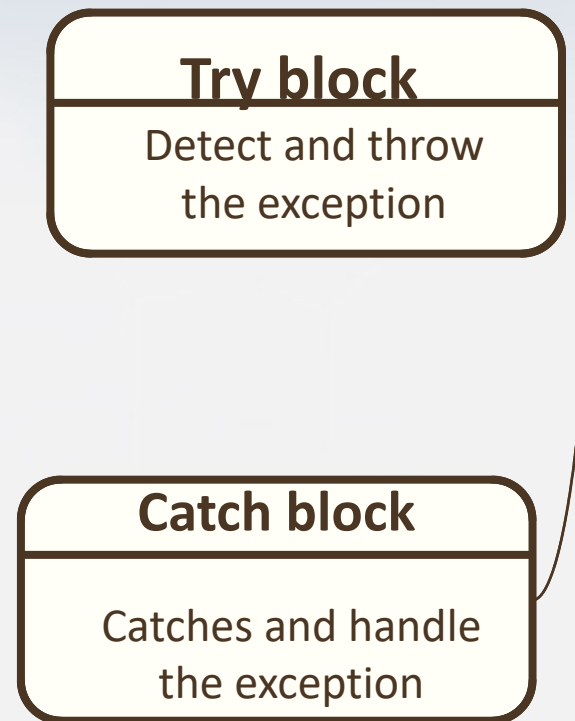
- Synchronous:- Exception such as Division by error, array out of bound, memory overflow ect
- asynchronous:- The errors that are out of the control of the program such as keyboard interrupt.



Here the proposed exception handline mechanism in c++ is designed to handle only synchronous exception

The exception handling mechanism in C++ is basically built upon three keywords ***try***, ***throw*** and ***catch***. The **try** is used to preface the statement (surrounded by braces) which may generate the exception. Then, if the exception is detected then it is thrown by the **throw** statement in the **try** block. Then the exception thrown by the **throw** statement in the **try** block is caught by the **catch** statement and handled appropriately.

The **catch** block that catches the exception should immediately follow the **try** block.



# Function generating the exception

Most often the exception is thrown by the function which is invoked in the try block. The point where the exception is thrown is known as throw point. Once the exception is thrown the control cannot return to the throw point.

