

```

#include <pthread.h>
#include "_speculator.h"
using namespace std;

//! \class conditional_speculator
//! \brief implements an abstract class that is the basis for instantiable child
//! classes such as .
//! It simply encapsulates the speculator state (active or inactive) and the
//! reference of the shared data, operations over those elements have to be
//! implemented in the instantiable classes.
//!
//! Limitations:
//!

class _conditional_speculator: protected _speculator {
    protected:

        //mutex related to _valid_branch
        pthread_mutex_t _valid_branch_mutex;

        _conditional_speculator () { //necesarry to initialize the mutex.
            pthread_mutex_init (&_valid_branch_mutex, NULL);
        }
};

```