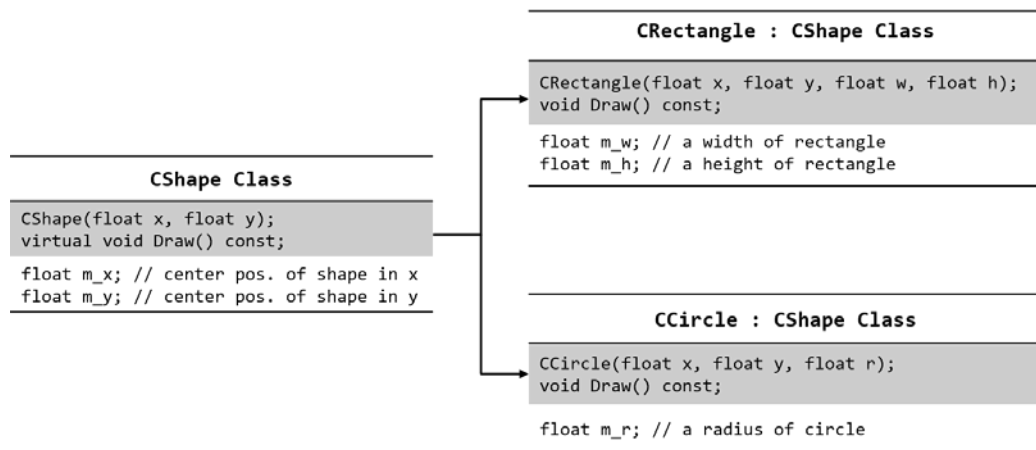


1 Draw multiple rectangles and circles on Windows.

- 1.1 Create **three** classes: **CRectangle** defines a rectangle shape, **CCircle** defines a circle shape, and **CShape** is a base(parent) class for CRectangle and CCircle classes as follows, [3 pt]



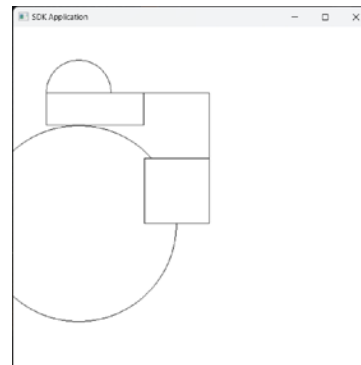
- 1.2 Each class should be declared and defined in separate ".h" and ".cpp" files, respectively. [2 pt]
- 1.3 Use the following codes to display rectangles and circles with given positions and sizes: [5 pt]

```

// main.cpp
CShape* shapes[5] = {NULL};
shapes[0] = new CCircle(100, 100, 50);
shapes[1] = new CRectangle(300, 300, 100, 100);
shapes[2] = new CRectangle(200, 100, 50, 150);
shapes[3] = new CCircle(100, 300, 150);
shapes[4] = new CRectangle(200, 200, 300, 300);

for (int i = 0; i < 5; ++i)
    shapes[i]->Draw();

for (int i = 0; i < 5; ++i)
{
    delete shapes[i];
    shapes[i] = NULL;
}
  
```



• Implementation requirements

- ✓ Program should be executed in a **x86 (32-bit) Release** mode.
- ✓ All implemented functions should be executed from the **same** program.

• Submission instruction

- ✓ 프로그램 build에 필요 없는 폴더(Debug, Release, ipch) 및 파일(*.db)은 **모두 삭제**.
(*폴더 보기 → 표시 → 숨김 항목 → .vs 폴더 → ipch 폴더 및 *.db 파일 삭제)
- ✓ 필요한 설명이 있으면 "**readme.txt**"에 기술.
- ✓ 프로젝트 폴더 전체를 압축(**ZIP**, 제한: **10MB**) 후 **ClassRoom**에 제출 (*E-mail로 받지 **않음**).

• Cautions

- ✓ **Visual Studio 2022**에서 source code가 build 안되거나, 프로그램 실행이 안되면 **0점** 처리.
- ✓ Source code의 copy시 원본 제공자와 복사자 모두 **0점** 처리.
- ✓ 제출 시간 지나면 **0점** 처리.