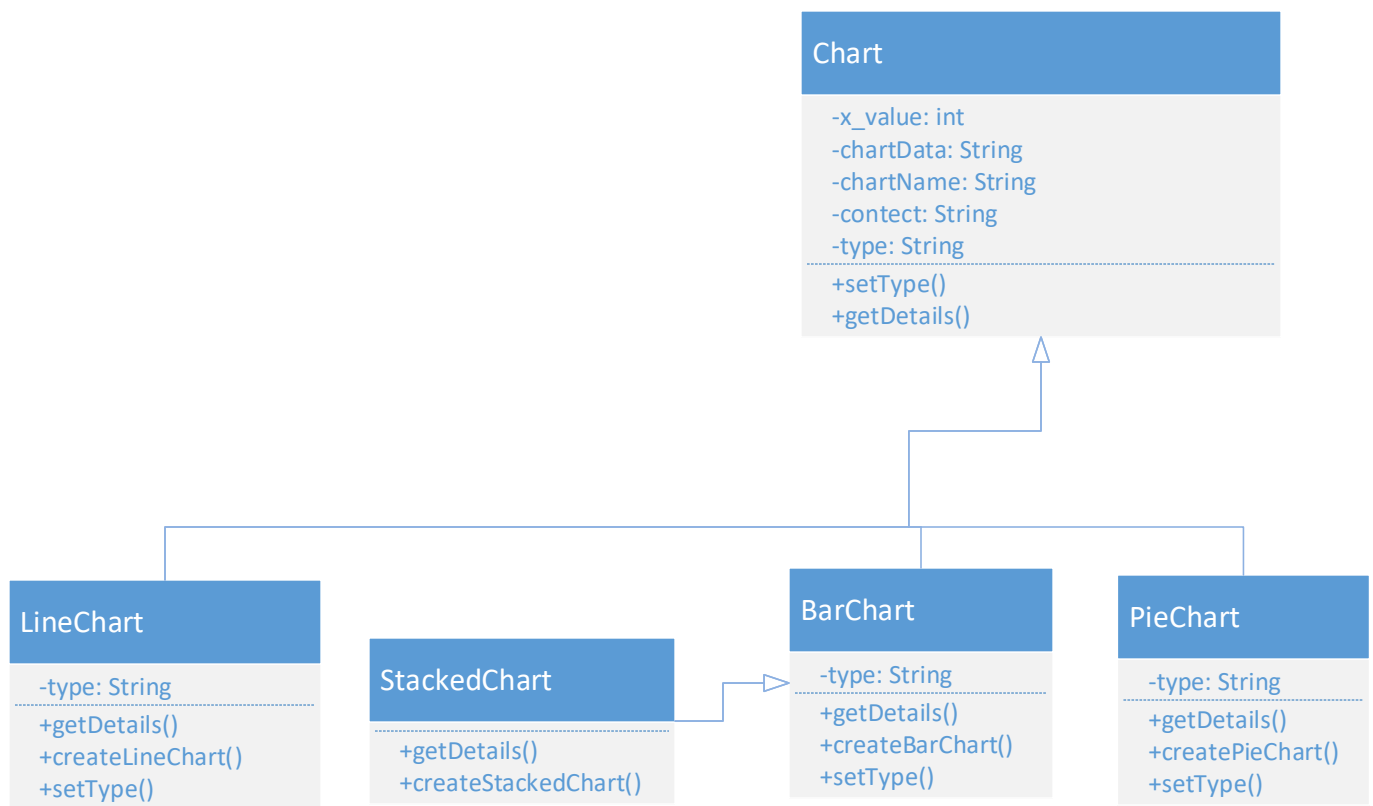


Template Design Pattern

- Abstract class is Chart
- It can call `getDetails()` amongst all. And `setType()` differs for each of the chart.
- Additional functionalities of different classes are included in their respective class.



Singleton Design Pattern

- All the different datasets are global point of contact for the user.
- SchoolProfile, CrimeReport, SatScore, Demographics, SchoolProgressReport are all the singleton classes.
- Each class has its own separate attributes and interfaces.

SchoolProfile

```
-studentCount: Int
-lowIncomeStudentCount: Int
-englishLearnerCount: Int
-dressCode: Bool
-rating: String
-getEnrollmentRate: Int
-modeOfTransport: ModeOfTransport
-----
+getStudentCount()
+getLowIncomeStudentCount()
+getEnglishLearnerCount()
+isDressCodePresent()
+getEnrollmentRate()
+getModeofTransport()
```

Demographics

```
-genderStat: Gender
-ethnicity: Ethnicity
-----
+getGenderStat()
+getEthnicity()
```

SchoolProgressReport

```
-attainmentRating: String
-creativity: String
-survey: Survey
-attendance: String
-growth: Growth
-----
+getAttainmentRating()
+isSchoolCreative()
+getsurvey(type)
+getAttendance(type)
+getGrowth(type)
```

CrimeReport

```
-menArrests: Int
-womenArrests: Int
-weaponArrests: Weapon
-drugArrests: Drug
-liquorArrests: Liquor
-----
+getMenArrests()
+getWomenArrests()
+getweaponArrests()
+getdrugArrests()
+getliquorArrests()
```

SatScore

```
-satTestTakeCount: Int
-criticalReadAvgScore: Int
-mathAvgScore: Int
-writeAvgScore: Int
-graduationRate: Int
-----
-getSatTestCount()
-getCriticalReadScore()
-getMathAvgScore()
-getWriteAvgScore()
-getGraduationRate()
```


Façade Design Pattern

- Unifies a set of more complex class that belong to some subsystem.
- SchoolInfoFacade unifies the different datasets.
- SchoolInfoFacade is the single point of contact to choose the different dataset by a user.

