**Design patterns**

Problem var ve onun hell yolu Design patterndir.

Design patternler abstract yazmaga cagirir.

Pattern - name, problem,solution, and result dan ibaretdir.

Her pattern ideal olmur, yaxsi ve pis cehetleri var

Good Solution - patterndir.

Anti pattern - hemen problemin pis hellidir. Hemin patterni yola vererken islenir, yeni solutiona tapilmadiqda ele bele bad solution u yazilir.

*22 pattern oyreneceyik.*

**Creational Design Patterns. -** [**Creational Design Patterns (refactoring.guru)**](https://refactoring.guru/design-patterns/creational-patterns)

Obyektlerin yaranma prosesini sadelesdirmek , yaxsilasdiremaq

Creational design patterns provide various object creation mechanisms, which increase flexibility and reuse of existing code.

**Methods**:  
1) **Factory Method**-Factory Method is a creational design pattern that provides an interface for creating objects in a superclass, but allows subclasses to alter the type of objects that will be created.

Her seyi konkret yox abstraca baglayiriq ve istenilen seyi yaradiriq.

lazim olani qaytaran metod (airlogistic, airplane, shiplogistic, ship)

2) **Abstract Method**-Abstract Factory is a creational design pattern that lets you produce families of related objects without specifying their concrete classes.

Factory metodunun complex formasidir(kimidir). (table, sofa, chair,- modern, victorian)

3) **Singleton Method** - Singleton is a creational design pattern that lets you ensure that a class has only one instance, while providing a global access point to this instance.

Bir seyi yalniz bir defe(ne ucun bir defe mes. agir obyektdir deye)yaratmaga icaze verir. ve global access olur

SingleTon Metodda bir nece thread gele biler. Ona gore yalniz bir threadin obyketi yaratmasi ucun lockdan istifade edirik.

**lock cari is geden bloku threaden izolasiya edir, eger her hansi bir thread giribse, digerine girmeye icaze vermir, gozledir.**