

```
{std::basic_string<
Char>
||}
```

```
{std::string
||}
```

-Name
-Patronymic_
-Rank_
-Surname_

```
{TCapitanInfo
||+ TCapitanInfo()
+ TCapitanInfo(const
std::string &name,
const std::string &surname,
const std::string &patronymic,
const std::string &rank)
+ TCapitanInfo(const
TCapitanInfo &other)
+ TCapitanInfo & operator
=(const TCapitanInfo &other)
+ bool operator==(const
TCapitanInfo &other)
const
+ void SetName(const
std::string &name)
+ void SetSurname(const
std::string &surname)
+ void SetPatronymic
(const std::string &patronymic)
+ void SetRank(const
std::string &rank)
+ std::string GetName
() const
+ std::string GetSurname
() const
+ std::string GetPatronymic
() const
+ std::string GetRank
() const
}
```

#CapitanInfo_

```
{TShip
|# int ShipType_
# int MaxSpeed_
# int NowSpeed_
# int HPTotal_
# int HPNow_
# int Cost_
|+ TShip(int x, int y,
int shipType, const
std::string &shipName,
const TCapitanInfo &capitanInfo,
int maxSpeed, int nowSpeed,
int hpTotal, int hpNow, int cost)
+ TShip(const TShip
&other)
+ TShip & operator=(const
TShip &other)
+ bool operator==(const
TShip &other) const
+ void SetShipType(int
shipType)
+ void SetShipName(const
std::string &shipName)
+ void SetCapitanInfo
(const TCapitanInfo
&capitanInfo)
+ void SetMaxSpeed(int
maxSpeed)
+ void SetNowSpeed(int
nowSpeed)
+ void SetHPTotal(int
hpTotal)
+ void SetHPNow(int hpNow)
+ void SetCost(int cost)
+ int GetShipType() const
+ std::string GetShipName
() const
+ TCapitanInfo GetCapitanInfo
() const
+ int GetMaxSpeed() const
+ int GetNowSpeed() const
+ int GetHPTotal() const
+ int GetHPNow() const
+ int GetCost() const
+ void BeDamaged(int
damage)
+ virtual void Print
() const
+ virtual std::unique
_ptr< TShip > Clone
() const
}
```

#ShipName_

#Holder_

```
{TWeaponHolder
||+ TWeaponHolder()
+ TWeaponHolder(TWeapon
*gunFront, TWeapon *gunBack,
TWeapon *gunLeftSide, TWeapon
*gunRightSide)
+ TWeaponHolder(const
TWeaponHolder &other)
+ TWeaponHolder & operator
=(const TWeaponHolder &other)
+ bool operator==(const
TWeaponHolder &other)
const
+ TWeapon * GetGunByPlace
(EPlaceOnShip place) const
+ void SetGunByPlace
(EPlaceOnShip place,
TWeapon *what)
+ int MakeShot(int sqDistance,
int timeNow)
+ void Print() const
+ int GetCost() const
+ static bool SameGuns
(const TWeapon *lhs,
const TWeapon *rhs)
- static std::unique
_ptr< TWeapon > createUnique
PtrByGunPtr(TWeapon *gun)
}
```

-Weapons_

```
{std::vector< std::pair
< EPlaceOnShip, std::unique
_ptr< TWeapon > > >
|+ std::pair< EPlaceOnShip,
std::unique_ptr< TWeapon
> > elements
|}
```

< std::pair< EPlaceOnShip, std::unique_ptr< TWeapon > > >

+elements

```
{T
||}
```

```
{TObjectOnMap
|- int X_
- int Y_
|+ TObjectOnMap(int x,
int y)
+ TObjectOnMap(const
TObjectOnMap &other)
+ virtual ~TObjectOnMap
()=default
+ TObjectOnMap & operator
=(const TObjectOnMap &other)
+ bool operator==(const
TObjectOnMap &other)
const
+ void SetX(int x)
+ void SetY(int y)
+ int GetX() const
+ int GetY() const
+ int DistTo(const TObject
OnMap &other) const
}
```

```
{TBase
|- int BaseType_
|+ TBase(int x, int y,
int baseType)
+ TBase(const TBase
&other)
+ TBase & operator=(const
TBase &other)
+ bool operator==(const
TBase &other) const
+ void SetBaseType(int
baseType)
+ int GetBaseType() const
}
```

```
{TWarShip
||+ TWarShip(int x, int
y, int shipType, const
std::string &shipName,
const TCapitanInfo &capitanInfo,
int maxSpeed, int nowSpeed,
int hpTotal, int hpNow, int cost,
const TWeaponHolder &holder)
+ TWarShip(const TWarShip
&other)
+ TWarShip & operator
=(const TWarShip &other)
+ bool operator==(const
TWarShip &other) const
+ void SetHolder(const
TWeaponHolder &holder)
+ TWeaponHolder & GetHolder()
+ int GetCostWithGuns
() const
+ bool MakeShot(TShip
&to, int timeNow)
+ void Print() const
override
+ std::unique_ptr< TShip
> Clone() const override
}
```

-ToSpawn_

```
{TSpawnDescriptor
|- int SpamCount_
- int LoopTime_
- int LastSpam_
|+ TSpawnDescriptor(const
TWarShip &toSpam, int
spamCount, int loopTime,
int lastSpam)
+ TSpawnDescriptor(const
TSpawnDescriptor &other)
+ TSpawnDescriptor &
operator=(const TSpawnDescriptor
&other)
+ bool operator==(const
TSpawnDescriptor &other)
const
+ MyList< TWarShip >
Spawn(int time)
+ void SetXY(int x, int y)
}
```

-Spawner_

```
{TPirateBase
||+ TPirateBase(int x,
int y, int baseType,
const TSpawnDescriptor
&spawner)
+ TPirateBase(const
TPirateBase &other)
+ TPirateBase & operator
=(const TPirateBase &other)
+ bool operator==(const
TPirateBase &other) const
+ void SetSpawnDescriptor
(const TSpawnDescriptor &x)
+ void SetXYInSpawn()
+ TSpawnDescriptor &
GetSpawnDescriptor()
}
```