# MainWindow

- -ui : Ui::MainWindow
- currentuser : shared\_ptr<User>
- +MainWindow(QWidget \*) : MainWindow
- +~MainWindow() : void
- +inizializeMainWindowsUi(shared\_ptr<User>): void
- ... private slots for handling ui event...
- +(signal) logout() : void
- -nullNewUserAttribute() : bool
- -nullNewOperationAttribute() : bool
- -clearNewUserAttribute() : void
- -clearNewOperationAttribute() : void

## LoginForm

- -ui : Ui::LoginForm
- -mainwindow\_ref : MainWindow\*
- +LoginForm(QWidget\*, MainWindow\*) : LoginForm
- +~LoginForm(): void
- -(slot) on\_pushButton\_login\_clicked() : void
- -(slot) logout : void

RED ORANGE

GREEN

COLOR

# Helpers

+extract\_values\_from\_map(std::map<TK, TV> const& input\_map) :
std::vector<TV>

#### OperationRepository

- -operationtable : map<int, shared\_ptr<Operation>
- -instance : OperationRepository\*
- -OperationRepository(): OperationRepository
- +getInstance() : OperationRepository\*
- + getOperationById(int) : shared\_ptr<Operation>
- +insertOperation(Operation\*) : void
- +removeOperation(int): bool
- +getAllOperation() : vector<shared\_ptr<Operation>>
- +getAllOperation(QDate&) : vector<shared\_ptr<Operation>>
- +getAllOperation(int) : vector<shared\_ptr<Operation>>
- +getAllOperation(int, QDate&) : vector<shared\_ptr<Operation>>
- +~OperationRepository(): void

## Operation

- -idoperation : int
- <u>-idprog : int</u>
- -name : QString
- -address : QString
- -coordinate : QGeoCoordinate\*
- -petitioner : QString
- -cellnumber : QString
- -color : COLOR
- -leader : shared\_ptr<User>
- -team : shared\_ptr<Team>
- -starttime : QDateTime\*
- -finishtime : QDateTime\*
- +Operation(): Operation
- +Operation(QString, QString, QGeoCoordinate\*, QString, QString, COLOR, shared\_ptr<User>, shared\_ptr<Team>, QDateTime\*, QDateTime\*): Operation
- +~Operation(): void
- ... getter and setters...
  +colorToString(COLOR) : QString
- +colorTolcon(COLOR) : Qlcon
- +stringToColor(QString) : COLOR

## UserRepository

- -usertable : map<int, shared\_ptr<User>
- -instance : UserRepository\*
- -UserRepository(): UserRepository
- +getInstance() : UserRepository\*
- + getUserById(int) : shared\_ptr<User>

+getAllUser(): vector<shared\_ptr<User>>

- +insertUser(User\*) : void
- +removeUser(int) : bool
- +~TeamRepository(): void

#### TeamRepository

- -teamtable : map<int, shared\_ptr<Team>
  -instance : TeamRepository\*
- -TeamRepository() : TeamRepository
- <u>+getInstance()</u>: <u>TeamRepository\*</u>
- + getTeamById(int) : shared\_ptr<Team>
- +getAllTeam(): vector<shared\_ptr<Team>>
- +insertTeam(Team\*) : void
- +removeTeam(int) : bool
- +~TeamRepository(): void

#### Team

- -idteam : int
- -name : QString
- -areaname : QString
- -coordinate : QGeoCoordinate\*
- -<u>idprog : int</u>
- +Team(): Team
- +Team(QString&, QString&, QGeoCoordinate\*)
- +~Team(): void
- +getIdteam(): int
- +setIdteam(int) : void
- +getName(): QString&
- +setName(QString&) : void
- +getAreaname : QString&
- +setAreaname(QString&): void
- +getCoordinate() : QGeoCoordinate\*
- +setCoordinate(QGeoCoordinate\*): void
- +toString(): QString

# Volunteer

### #team : shared\_ptr<Team>

- +Volunteer() : Volunteer
- +Volunteer(QString&, QString&, QDate\*, QString&, QChar&, QPixmap\*, shared\_ptr<Team> team = shared\_ptr<Team>(nullptr)) : Volunteer
- +(virtual) ~Volunteer() : void
- +(virtual) getTeam() : shared\_ptr<Team>
- +setTeam(shared\_ptr<Team) : void
- +(virtual) initializeMainWindow(Ui::MainWindow\* ui) : void
- +(virtual) populateOperationList(QListWidget \*list, const QDate &date) : void +(virtual) toString() : QString

## Administrator

- +Administartor() : Administrator
- +Administartor(QString&, QString&, QDate\*, QString&, QString&, QChar&, QPixmap\*): Administrator
- +(virtual) ~Administrator() : void
- +(virtual) initializeMainWindow(Ui::MainWindow\*) : void
- +(virtual) addNewUser(User\* user) : void
- +(virtual) addNewUser(Volunteer\* volunteer, int idteam) : void
- +(virtual) populateComboBoxTeams(QComboBox\* comboBox, bool isForeman) : void +(virtual) populateListBoxUsers(QListWidget\* listWidget, int
- idteam = -1) : void
- +(virtual) deleteUser(int iduser) : void
- +(virtual) getTeam() : shared\_ptr<Team>

#### Foreman

- +Foreman(): Foreman
- +Foreman(QString&, QString&, QDate\*, QString&, QChar&, QPixmap\*,

User

+User(QString&, QString&, QString&, QDate\*, QString&,

QString&, QChar&, QPixmap\*): User

#iduser : int

#password : QString
#name : QString
#surname : QString

#birthday : QDate\*

#cellnumber : QString

#picture : QPixmap\*

#email : QString

#sex : QChar

<u>-idprog : int</u>

+User(): User

+(virtual) ~User()

+getIduser(): int

+setIduser(int) : void

+getName(): QString&

+getPassword(): QString&

+setName(QString&) : void

+getSurname(): QString&

+getBirthday(): QDate\*

+getEmail(): QString&

+setEmail(QString&)

+getSex(): QChar&

+setSex(QChar&) : void

+(virtual) toString() : QString

+setSurname(QString&): void

+setBirthday(QDate\*) : void

+getCellnumber() : QString&

+setCellnumber(QString&) : void

+(virtual) initializeMainWindow(Ui::MainWindow\*) : void

+(virtual) getTeam() : shared\_ptr<Team> = 0

+setPassword(QString&) : void

- shared\_ptr<Team> team = shared\_ptr<Team>(nullptr)) : Foreman
- +(virtual) ~Foreman() : void
- +(virtual) populateComboBoxTeams(QComboBox\* comboBox, bool isForeman) : void
- +(virtual) populateOperationList(QListWidget \*oplist, const QDate &date) : void
- +(virtual) getTeam() : shared\_ptr<Team>
- + populate Volunteer Combo Box (Q Combo Box \*combo Box): void
- +addNewOperation(Operation\* newop) : void