

Dokumentacja projektu z PROI

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1 Wprowadzenie

Tematem projektu jest „Baza danych dla szpitala”. Dokument zawiera:

- Strukturę projektu w postaci diagramu UML.
- Spis poleceń interfejsu REPL programu.

2 Struktura Programu

Strukturę modelu danych przedstawiono na Fig. 1. Strukturę programu przedstawiono na Fig. 2.

3 Polecenia REPL

Polecenia dzielą się na dwie kategorie:

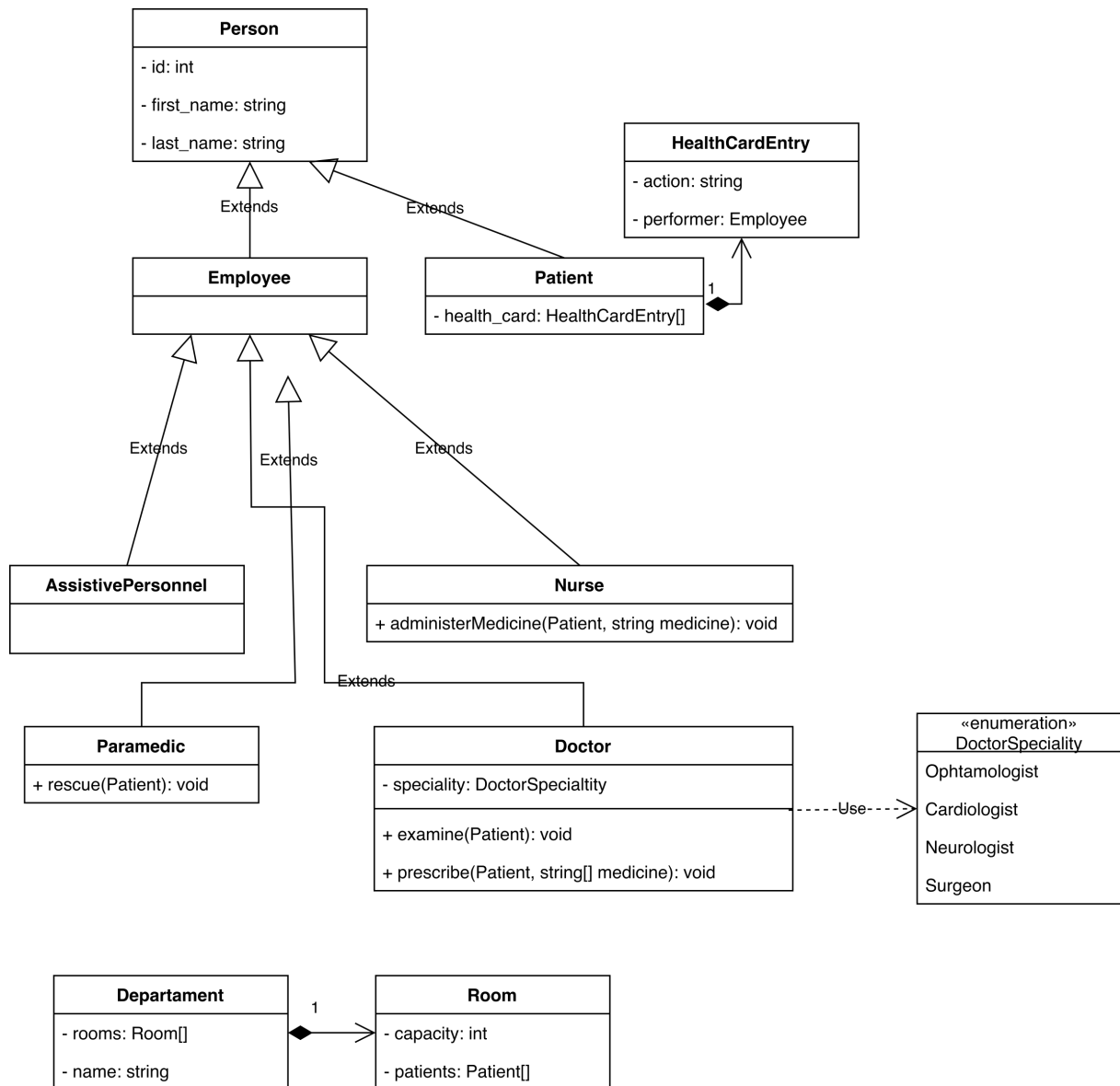
- DML, oraz
- DQL.

Polecenia DML pozwalają na manipulowanie danymi, a polecenia DQL na odczytywanie danych. Polecenia DML dzielą się dodatkowo na:

- polecenia `add`,
- polecenia `delete`,
- polecenia `update`,
- operacje dziedziny.

Przykłady poleceń przedstawiono na następujących listingach:

- Polecenia `add`: List. 1.
- Polecenia `delete`: List. 2.
- Polecenia `update`: List. 3.
- Operacje dziedziny: List. 4.
- Polecenia DQL: List. 5.

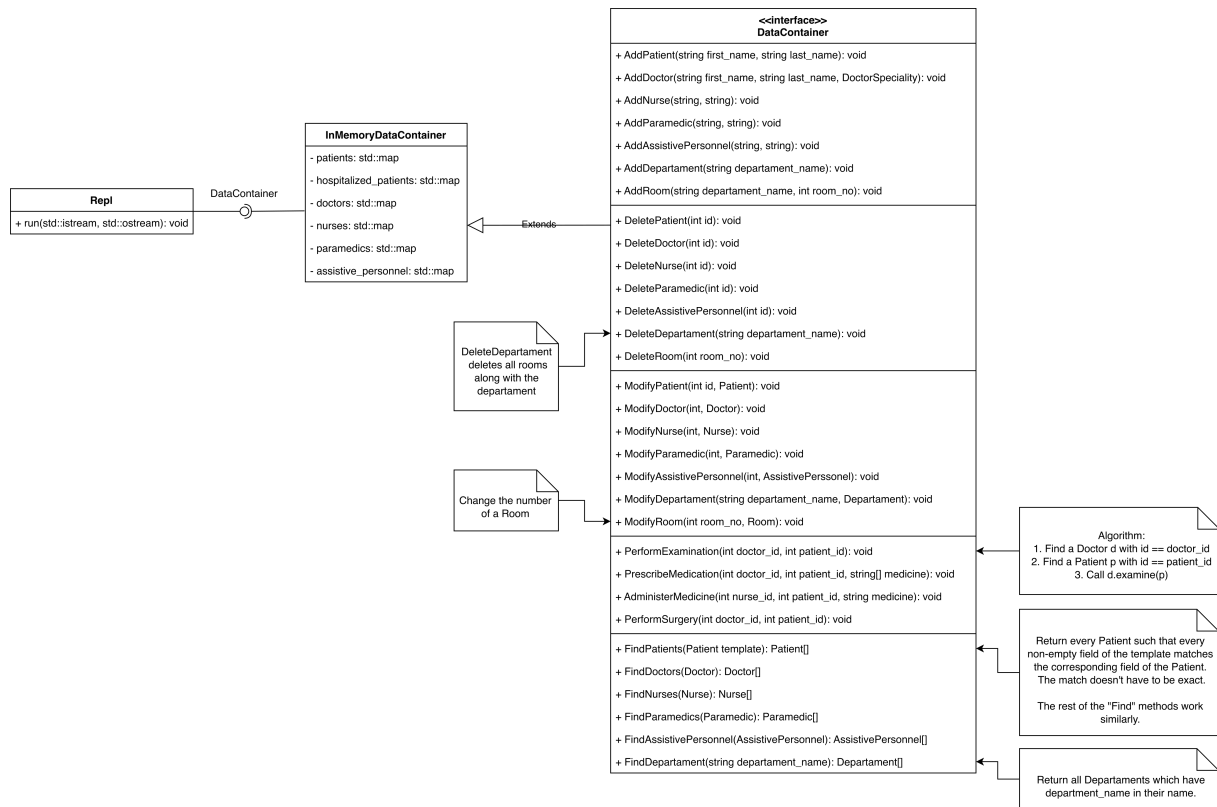


Rysunek 1: Model danych projektu

```

add patient { first_name = <first_name>, last_name = <last_name> }
add doctor { first_name = <first_name>, last_name = <last_name>, speciality =
<doctor_speciality> }
add nurse { first_name = <first_name>, last_name = <last_name> }
add paramedic { first_name = <first_name>, last_name = <last_name> }
add assistive_personnel { first_name = <first_name>, last_name = <last_name> }
add departament { name = <departament_name> }
add room { departament = <departament_name>, room_no = <integer> }
  
```

Listing 1: Polecenia add



Rysunek 2: Struktura projektu

```

delete patient { id = <integer> }
delete doctor { id = <integer> }
delete nurse { id = <integer> }
delete paramedic { id = <integer> }
delete assistive_personnel { id = <integer> }
delete department { department = <department_name> }
delete room { department = <department_name>, room_no = <integer> }

```

Listing 2: Polecenia delete

```

update patient { id = <integer>
    [, first_name = <first_name>]
    [, last_name = <last_name>] }
update doctor { id = <integer>
    [, first_name = <first_name>]
    [, last_name = <last_name>]
    [, doctor_speciality = <doctor_speciality>] }
update nurse { id = <integer>
    [, first_name = <first_name>]
    [, last_name = <last_name>] }
update paramedic { id = <integer>
    [, first_name = <first_name>]
    [, last_name = <last_name>] }
update assistive_personnel { id = <integer>
    [, first_name = <first_name>]
    [, last_name = <last_name>] }
update departament { departament_name = <departament_name>,
    new_name = <departament_name> }
update room { departament = <departament_name>,
    room = <integer>,
    new_no = <integer> }

```

Listing 3: Polecenia update

```

examine doctor { id = <integer> } patient { id = <integer> }
    | examine doctor { first_name = <first_name>, last_name = <last_name> }
      patient { id = <integer> }
    | examine doctor { first_name = <first_name>, last_name = <last_name> }
      patient { first_name = <first_name>, last_name = <last_name> }
prescribe doctor { id = <integer> }
    patient { id = <integer> }
    meds [ med1 [, med2][, med3][...] ]
administer nurse { id = <integer> }
    patient { id = <integer> }
    med <med1>
surgery doctor { id = <integer> } patient { id = <integer> }

```

Listing 4: Operacje dziedziny

```

search patient {}
search doctor {}
search nurse {}
search paramedic {}
search assistant_personnel {}
search departament {}

```

Listing 5: Polecenia DQL