

Advanced Software Engineering WS 2014/15

Task 2: Model Driven Developemt

Task-ID: XTX

Group: 3

Dieses Dokument enthält die getroffenen Annahmen zur Umsetzung von Task 3.

Task 3

a) DSL (.xtext) an den Beispielinstanzen in der Aufgabenstellung gehalten.

```

grammar at.ac.univie.swa.ase2014.a1276754.task3.Mydsl with
org.eclipse.xtext.common.Terminals

generate mydsl
"http://www.ac.at/univie/swa/ase2014/a1276754/task3/Mydsl"

Model:
    'Distributors:'
        distributors+=Distributor+
    'Library:'
        songs+=Song+
    'Playlists:'
        playlists+=Playlist*
;

Distributor:
    name=ID
    'Address:' adresse=STRING
    'Account Information:'
        acc_info=Account_Information
;

Account_Information:
    'IBAN:' iban=STRING
    'BIC:' bic=STRING
;

Song:
    name=ID
    'sung by' artist=STRING
    'produced by' dist=[Distributor]
    'length:' length=Time
    'genre:' genre=Genre
    'price:' price=Double
;

Time:
    min=INT ':' sec=INT
;

Double:
    INT '.' INT
;

Playlist:
    name=ID ' consists of'
    (songs+= [Song] ',')* (songs+= [Song])?
    ('Playlist' incl+= [Playlist]
    //      ('without' (excl+= [Song] ',')* excl+= [Song] )?
    //      ('without' excl+= [Song] )?
    )*
;

enum Genre:
    pop='POP' | rock='ROCK' | hardrock='HARDROCK' | classic='CLASSIC' |
    folk='FOLK' | other="OTHER"
;

```

b) Die Instanzen wurden um weitere Songs und Playlist von den Beispielinstanzen ergänzt.

```
Distributors:
UniversalMusic
Address: "56 Some Street, 12345 New York, NY, US"
Account Information:
IBAN: "US 12 123 123 123"
BIC: "SOMEUSX1"
SonyMusic
Address: "1 Sony Street, 2345 Tokia, JP"
Account Information:
IBAN: "JP 12 34 43 55 93"
BIC: "SOMEJJP1"

WarnerMusic
Address: "1 Warner Gasse, 1010 Wien, AT"
Account Information:
IBAN: "AT 234 3234 234"
BIC: "Dumdidum"

Library:
Come_as_you_are
sung by "Nirvana"
produced by UniversalMusic
length: 7:23
genre: ROCK
price: 7.75

Bohemian_Rhapsody
sung by "Queen"
produced by UniversalMusic
length: 5:32
genre: ROCK
price: 3.65

Get_lucky
sung by "Daft Punk"
produced by SonyMusic
length: 3:01
genre: OTHER
price: 4.32

Song2
sung by "Blur"
produced by UniversalMusic
length: 4:23
genre: ROCK
price: 3.45

Roar
sung by "Katie Perry"
produced by SonyMusic
length: 2:35
genre: POP
price: 4.67

Geronimo
sung by "Sheppard"
produced by WarnerMusic
length: 4:12
genre: POP
price: 3.99

Last_Christmas
sung by "Wham"
produced by SonyMusic
length: 1:99
genre: CLASSIC
price: 5.99

Liebe
sung by "Sido"
produced by WarnerMusic
length: 3:15
genre: OTHER
price: 0.99

Tagebuch
sung by "MoTrip"
produced by SonyMusic
length: 4:09
genre: POP
price: 1.79
```

```
Forever
sung by "Eminem"
produced by UniversalMusic
length:5:58
genre:OTHER
price: 1.29

Playlists:
ComplexList consists of
Song2,
Liebe,
Tagebuch

SimpleList consists of
Bohemian_Rhapsody,
Come_as_you_are,
Get_lucky,
Geronimo

Test consists of
Forever, Roar, Last_Christmas
Playlist ComplexList
without Song2
```

c) Hier hatte ich Probleme Songs aus wiederverwendeten Playlists zu entfernen. Die Variable „excl“ wurde hierfür in der .xtext-Datei benutzt. Doch beim Generieren habe ich erkannt, dass der Wert immer leer ist (siehe debug-Ausgaben) und die Songs nicht über die exclude-Funktion aus der HashMap genommen werden (die Methode wird gar nicht erst aufgerufen, durch die leere Variable), woraus das html generiert wird.