

# SharkNet

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## 1 GooglePlusProfile

A Google plus profile(g+ profile) is like a specified profile or an application based on the profile implementation. What a profile is and how it is used, is well explained in a previous chapter "Profile". The content which could be stored in this profile is very similar to a real g+ profile. One of the main reasons for this application is to make a/an wrapper/interface for g+ profile information. If there is a stream from Google which provides data it is possible to easily make an g+ profile object and fill it with data from the stream. At the end our object looks like the raw data of a g+ profile from Google.

### 1.1 GooglePlusProfileFactory

These g+ profile factory is a manager of g+ profiles. It provides functions to create g+ profiles, to get g+ profiles and to remove them. E.g. `GooglePlusProfile createGooglePlusProfile(String name, String profileURL) throws SharkKBException;` is a function to create a g+ profile. Parameter name is just the name of the profile and parameter profileURL is the location or the link where the profile is located or where it can be found. The implementation of this function is based on functionalities of "ProfileFactory". To create a GooglePlusProfileFactory a ProfileFactory is needed and to create a ProfileFactory a SharkKB is needed. At the end all information or all g+ profiles are stored in the SharkKB. `GooglePlusProfile`

`createGooglePlusProfile(String name, String profileURL)` throws `SharkKBException` creates peers with a name and URL as semantic identifiers. These peers are used to be parameters of a `createProfile(PeerSementicTag)` function of the `ProfileFactory`. All functions of `GooglePlusProfileFactory` are like "createGooglePlusProfile(...)" because they use different functionalities of "ProfileFactory". Thats why these application is based on the profile/profileFactory implementation. The `GooglePlusProfileFactory` is based on `ProfileFactory` and the `GooglePlusProfile` is based on `Profile`.

### 1.1.1 Using and testing Alice GooglePlusProfile

```
public class AliceGooglePlusProfileTest {

    private SharkKB kb = new InMemoSharkKB();
    private ProfileFactory profileFactory;
    private GooglePlusProfileFactory googlePlusProfileFactory;

    public AliceGooglePlusProfileTest() throws SharkKBException {
        profileFactory = new ProfileFactoryImpl(kb);
        googlePlusProfileFactory = new GooglePlusProfileFactoryImpl(profileFacto
    }

    @Test
    public void testCompleteAliceProfile() throws SharkKBException{
        //Create and complete Alice g+ Profile
        GooglePlusProfile myGooglePlusProfile =
            googlePlusProfileFactory.createGooglePlusProfile
                ("Alice", "http://www.sharksystem.net/alice.html");
        myGooglePlusProfile.setFirstName("Alllllice");
        myGooglePlusProfile.setLastName("Alpha");
        myGooglePlusProfile.setNickname("Ali");
        myGooglePlusProfile.setFirstName("Alice");
        myGooglePlusProfile.setTagline
            ("Hi Im Alice I like to solve complex
             problems and writing good code.");
        myGooglePlusProfile.setIntroduction
            ("My story begins a long time ago,
             I was 14 when I created my first little program." +
```

```

        "At this moment I was so interested in programing
        it even becomes one of my greatest hobbies.");
myGooglePlusProfile.setBraggingRights
    ("I wrote my own linux kernel.");
myGooglePlusProfile.setOccupation
    ("I do my bachelors degree of applied science
    at the HTW subject: applied computing");
myGooglePlusProfile.setSkills
    ("Java, Scala, C++, C, PHP, HTML, CSS");
myGooglePlusProfile.addEmployment
    ("HTW", "Programmer", 2012, 2015,
    true, "I write Scala and Java tests.");
myGooglePlusProfile.addEducation("University of Applied Sciences",
    "Applied Computing", 2012, 2015, true,
    "I learned a lot about programming and software engineering.");
myGooglePlusProfile.addPlace("Berlin", true);
myGooglePlusProfile.addPlace("London", false);
myGooglePlusProfile.setGender("Female");
myGooglePlusProfile.setLookingforFriends(true);
myGooglePlusProfile.setLookingforDating(true);
myGooglePlusProfile.setLookingForNetworking(true);
myGooglePlusProfile.setLookingForRelationship(false);
myGooglePlusProfile.setBirthday("03.12.1992");
myGooglePlusProfile.setRelationship("Im in a relation with Bob.");
myGooglePlusProfile.addOtherName("Jizy");
myGooglePlusProfile.addHomeContact("Mobile", "0151-2357823");
myGooglePlusProfile.addWorkContact("Phone", "030-28665432");
myGooglePlusProfile.addWorkContact("Address", "Rathenau Str. 42");
myGooglePlusProfile.addWorkContact("Fax", "030-28665433");
myGooglePlusProfile.addOtherProfiles
    ("BobsProfile", "https://google/googlePlus/Profiles/Bob");
myGooglePlusProfile.addContributorTo
    ("SharkNet", "http://www.sharksystem.net/apps.html");
myGooglePlusProfile.addLinks
    ("My favorite website", "http://google.com");

//Reading the Profile
assertEquals("Alice", myGooglePlusProfile.getFirstName());

```

```

assertEquals("Alpha", myGooglePlusProfile.getLastName());
assertEquals("Ali", myGooglePlusProfile.getNickname());
assertEquals("Hi Im Alice I like to solve complex problems and
    writing good code.", myGooglePlusProfile.getTagline());
assertEquals("My story begins a long time ago,
    I was 14 when I created my first little program." +
    "At this moment I was so interested in programing
    it even becomes one of my greatest hobbies.",
    myGooglePlusProfile.getIntroduction());
assertEquals("I wrote my own linux kernel.",
    myGooglePlusProfile.getBraggingRights());
assertEquals("I do my bachelors degree of applied science
    at the HTW subject: applied computing",
    myGooglePlusProfile.getOccupation());
assertEquals("Java, Scala, C++, C, PHP, HTML, CSS",
    myGooglePlusProfile.getSkills());
assertEquals("HTW", myGooglePlusProfile.getEmployerName("0"));
assertEquals("Programmer", myGooglePlusProfile.getJobTitle("0"));
assertEquals(2012, myGooglePlusProfile.getStartOfEmployment("0"));
assertEquals(2015, myGooglePlusProfile.getEndOfEmployment("0"));
assertEquals(true, myGooglePlusProfile.getIsEmploymentCurrent("0"));
assertEquals("I write Scala and Java tests.",
    myGooglePlusProfile.getJobDescription("0"));
assertEquals("University of Applied Sciences",
    myGooglePlusProfile.getSchoolName("0"));
assertEquals("Applied Computing", myGooglePlusProfile.getMajor("0"));
assertEquals(2012, myGooglePlusProfile.getStartOfEducation("0"));
assertEquals(2015, myGooglePlusProfile.getEndOfEducation("0"));
assertEquals(true, myGooglePlusProfile.getIsEducationCurrent("0"));
assertEquals("I learned a lot about programming and
    software engineering.",
    myGooglePlusProfile.getCourseDescription("0"));
assertEquals("Berlin", myGooglePlusProfile.getCity("0"));
assertEquals(true, myGooglePlusProfile.getIsPlaceCurrent("0"));
assertEquals("London", myGooglePlusProfile.getCity("1"));
assertEquals(false, myGooglePlusProfile.getIsPlaceCurrent("1"));
assertEquals("Female", myGooglePlusProfile.getGender());
assertEquals(true, myGooglePlusProfile.getLookingForFriends());

```

```

assertEquals(true, myGooglePlusProfile.getLookingForDating());
assertEquals(true, myGooglePlusProfile.getLookingForNetworking());
assertEquals(false, myGooglePlusProfile.getLookingForRelationship());
assertEquals("03.12.1992", myGooglePlusProfile.getBirthday());
assertEquals("Im in a relation with Bob.",
    myGooglePlusProfile.getRelationship());
assertEquals("Jizy", myGooglePlusProfile.getOtherName("0"));
assertTrue(myGooglePlusProfile.getHomeContactType(0).equals("Mobile")
    && myGooglePlusProfile.getHomeContactInfo(0)
    .equals("0151-2357823"));
assertTrue(myGooglePlusProfile.getWorkContactType(0).equals("Phone")
    && myGooglePlusProfile.getWorkContactInfo(0)
    .equals("030-28665432"));
assertTrue(myGooglePlusProfile.getWorkContactType(1).equals("Address")
    && myGooglePlusProfile.getWorkContactInfo(1)
    .equals("Rathenau Str. 42"));
assertTrue(myGooglePlusProfile.getWorkContactType(2).equals("Fax")
    && myGooglePlusProfile.getWorkContactInfo(2)
    .equals("030-28665433"));
assertTrue(myGooglePlusProfile.getOtherProfilesLabel(0)
    .equals("BobsProfile")
    && myGooglePlusProfile.getOtherProfilesUrl(0)
    .equals("https://google/googlePlus/Profiles/Bob"));
assertTrue(myGooglePlusProfile.getContributorsLabel(0)
    .equals("SharkNet")
    && myGooglePlusProfile.getContributorsUrl(0)
    .equals("http://www.sharksystem.net/apps.html"));
assertTrue(myGooglePlusProfile.getLinkLabel(0)
    .equals("My favorite website")
    && myGooglePlusProfile.getLinkUrl(0)
    .equals("http://google.com"));
}
}

```

- OCCUPATION

- SKILLS
  - EMPLOYMENTS
1. Know the structure and types of entries to access them or cast to the right types
  2. Parametrize getters so users can enter what entries they search
  3. Use `getSubEntry(...)` to search for entries
  4. Access content of entries with `.getContent()`
  5. First extract the entry list then get the right list element
  6. Return the correct casted content of the list element