Fall 2017

Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Issue** | **Description** | **Author** |
| Nov. 21 | 1 | Completed entity classes | All |
| Dec. 1 | 2 | Revised entity classes and added class attributes | All |
| Dec. 6 | 3 | Completed traceability matrix | All |
| Dec. 7 | 4 | Completed class diagram | All |
| Jan. 28 | 5 | Enhanced the class diagram and added extra classes | All |

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# Entity Classes

|  |  |
| --- | --- |
| Class name | Brief Description |
| User | The User class stores the user account information including the users name, the users password, users email address, first and last name of the user. This class is an interface. |
| Admin | The Admin class inherits from the User class. The admin creates and has authority over all the forms. The admin has the power to give users permission to update their passwords. This class also holds when the admin was hired and date they stopped working. |
| Physiotherapist | The Physiotherapist class inherits from the User class. This class stores the date they were hired and the date their term finished. The physiotherapist can make the exercises, rehab plan for the treatment, and he assigns them to the patient. |
| Patient | The Patient class holds the gender, date of birth, phone number, health card number, occupation, marital status, and postal code. The patient can book appointments, submit a form for ask a physio, and they can make payments. They also get assigned a treatment from physiotherapist. |
| RehabPlan | The rehab plan class holds the plan name, description, physiotherapist that made it, the goal of the rehab plan, and the date it was made. The class holds an instance of the exercise, and assessment tests. |
| AskAPhysio | This class holds the first name, last name, email address, and body of the form. This class is filled in by the patient and is handled by the physiotherapist. This class inherits from form. |
| Appointment | This class holds the time and comment of the appointment that is booked. This class is filled in by the patient. |
| Exercise | This class holds the following information about the exercise: name, description, author’s name, objectives, action steps, location, frequency and duration, multi-media URL, and the target date to have it completed by. This class is placed into rehab plan. |
| AssessmentTest | This class holds the following information about the assessment test: name, description and the author name. It holds an instance of rubric. It inherits from form. |
| Treatment | This class holds the date the rehab plan was assigned. |
| TestResults | This class holds the answer that was inputted by the patient. This class is filled out by the patient. |
| Recommendation | This class holds the rubric. It is held by answer. |
| Country | This class holds the country of the patients. One of these instances can be referenced by multiple patients. |
| Province | This class holds the province of the patient. One of these instances can be referenced by multiple patients. |
| City | This class holds the city of the patients. One of these instances can be referenced by multiple patients. |
| Payment | This class holds the account information of the patient. It has the function of authenticating accounts and sending emails to confirm payments. |
| Forms | This class is a form creator class so the admin can make forms dynamically as he wishes with whatever types of questions he wants. |
| Questions | This class is a generic class that holds all the questions available. |
| Question Type | This class holds the different type of questions. i.e. Multiple choice, open ended, true/false, etc. |
| User Account | This class authenticates the user and holds the user name and encrypted password |
| Gender | The gender attribute stores the gender of the patient user. |
| Marital Status | The marital status attribute stores the marital status of the patient user. |

# 

# Classes Attributes

1. ***User class***

|  |  |  |
| --- | --- | --- |
| Attribute name | Type | Brief Description |
| ID | String | ID of user type that’s logged in |
| email | String | The email attribute stores the email address of the user type that’s logged in |
| firstName | String | The name attribute stores the first name of the user type that’s logged in |
| lastName | String | The name attribute stores the last name of the user type that’s logged in |

1. ***Patient class***

|  |  |  |
| --- | --- | --- |
| Attribute name | Type | Brief Description |
| givenName | String | The first name of the patient user |
| familyName | String | The last name of the patient user |
| dateOfBirth | Date | The date of birth attribute stores the date of birth of the patient user. |
| postalCode | String | The postal code attribute stores the postal code of the patient user. |
| phoneNo | String | The phone number attribute stores the phone number of the patient user. |
| healthNo | String | The health card attribute stores the health number of the patient user. |
| occupation | String | The occupation attribute stores the occupation of the patient user. |

1. **Administrator Class**

|  |  |  |
| --- | --- | --- |
| Attribute name | Type | Brief Description |
| dateHired | Date | The date when the system administrator is hired by clinic. |
| dateFinished | Date | The date when the system administrator left the clinic. |

1. **Physiotherapist Class**

|  |  |  |
| --- | --- | --- |
| Attribute name | Type | Brief Description |
| dateHired | Date | The date when the physiotherapist is hired by clinic. |
| dateFinished | Date | The date when the physiotherapist left the clinic. |

1. ***Appointment class***

|  |  |  |
| --- | --- | --- |
| Attribute name | Type | Brief Description |
| time | Date | The time and date that the appointment is booked for. |
| comment | String | The reason for the appointment. |

1. **AskAPhysio class**

|  |  |  |
| --- | --- | --- |
| Attribute name | Type | Brief Description |
| firstName | string | The first name of the person asking a question. |
| lastName | string | The last name of the person asking a question. |
| emailAddress | string | The email address of the person asking a question. |
| comment | string | The question that the person is asking. |

1. **Payment Class**

|  |  |  |
| --- | --- | --- |
| Attribute name | Type | Brief Description |
| date | Date | The date that the payment is made. |
| amount | Double | The amount of the payment being made. |
| note | String | Any comments towards the payment |

1. **Country Class**

|  |  |  |
| --- | --- | --- |
| Attribute name | Type | Brief Description |
| name | string | The country of the user. |

1. **Province Class**

|  |  |  |
| --- | --- | --- |
| Attribute name | Type | Brief Description |
| name | string | The province of the user. |

1. **City Class**

|  |  |  |
| --- | --- | --- |
| Attribute name | Type | Brief Description |
| name | string | The city of the user. |

1. **Treatment Class**

|  |  |  |
| --- | --- | --- |
| Attribute name | Type | Brief Description |
| date | Date | The date attribute stores the date the treatment was assigned to the patient. |

1. **AssessmentTest Class**

|  |  |  |
| --- | --- | --- |
| Attribute name | Type | Brief Description |
| name | string | Name of the assessment test |
| description | String | Description of assessment test |
| authorName | String | Author of the assessment test |

1. ***RehabPlan class***

|  |  |  |
| --- | --- | --- |
| Attribute name | Type | Brief Description |
| rehabName | string | Name of rehab plan |
| description | string | Description of rehab plan |
| physioID | int | ID of physiotherapist that created the rehab plan |
| goal | string | Overall goal of the rehab plan |
| timeToComplete | string | Estimated time for the patient to complete the program |
| date | Date | The date attribute stores the date the plan was assigned to the patient |

1. ***Exercises class***

|  |  |  |
| --- | --- | --- |
| Attribute name | Type | Brief Description |
| name | String | The name of the exercise. |
| description | String | A description of the exercise. |
| authorName | string | The name of the creator of the exercise. |
| objectives | string | The goal of the exercise/what outcomes the exercise hopes to achieve upon completion. |
| actionsteps | String | The specific steps needed to do the exercise properly. |
| location | string | The specific muscle groups the exercise will target. |
| Frequency | int | How many repetitions of an exercise |
| Duration | double | How long each repetition should take. |
| multimediaURL | string | The link associated with this exercise that would take the user to a graphic depiction of how the exercise should look like. |
| targetDate | Date | The dates the exercises should take place. |

1. **Question Type Class**

|  |  |  |
| --- | --- | --- |
| Attribute name | Type | Brief Description |
| name | string | The type or format of the question |

1. **User Account Class**

|  |  |  |
| --- | --- | --- |
| Attribute name | Type | Brief Description |
| name | String | The name attribute stores the use account name of the user type that’s logged in |
| encryptedPassword | String | The password attribute stores the encrypted version of the password for the user type that’s logged in. A salted hash will be used in order to encrypt the password. |

1. **Gender Class**

|  |  |  |
| --- | --- | --- |
| Attribute name | Type | Brief Description |
| name | string | The gender of the user |

1. **Marital Status Class**

|  |  |  |
| --- | --- | --- |
| Attribute name | Type | Brief Description |
| name | string | The marital status of the user |

1. **Form Class**

|  |  |  |
| --- | --- | --- |
| Attribute name | Type | Brief Description |
| name | string | The name of the form |
| description | string | The description of the form |

1. **Questions Class**

|  |  |  |
| --- | --- | --- |
| Attribute name | Type | Brief Description |
| questionText | string | The marital status of the user |
| helpDescription | string | Extra information to help complete the question |
| order | string | The order of the questions shown in the form |

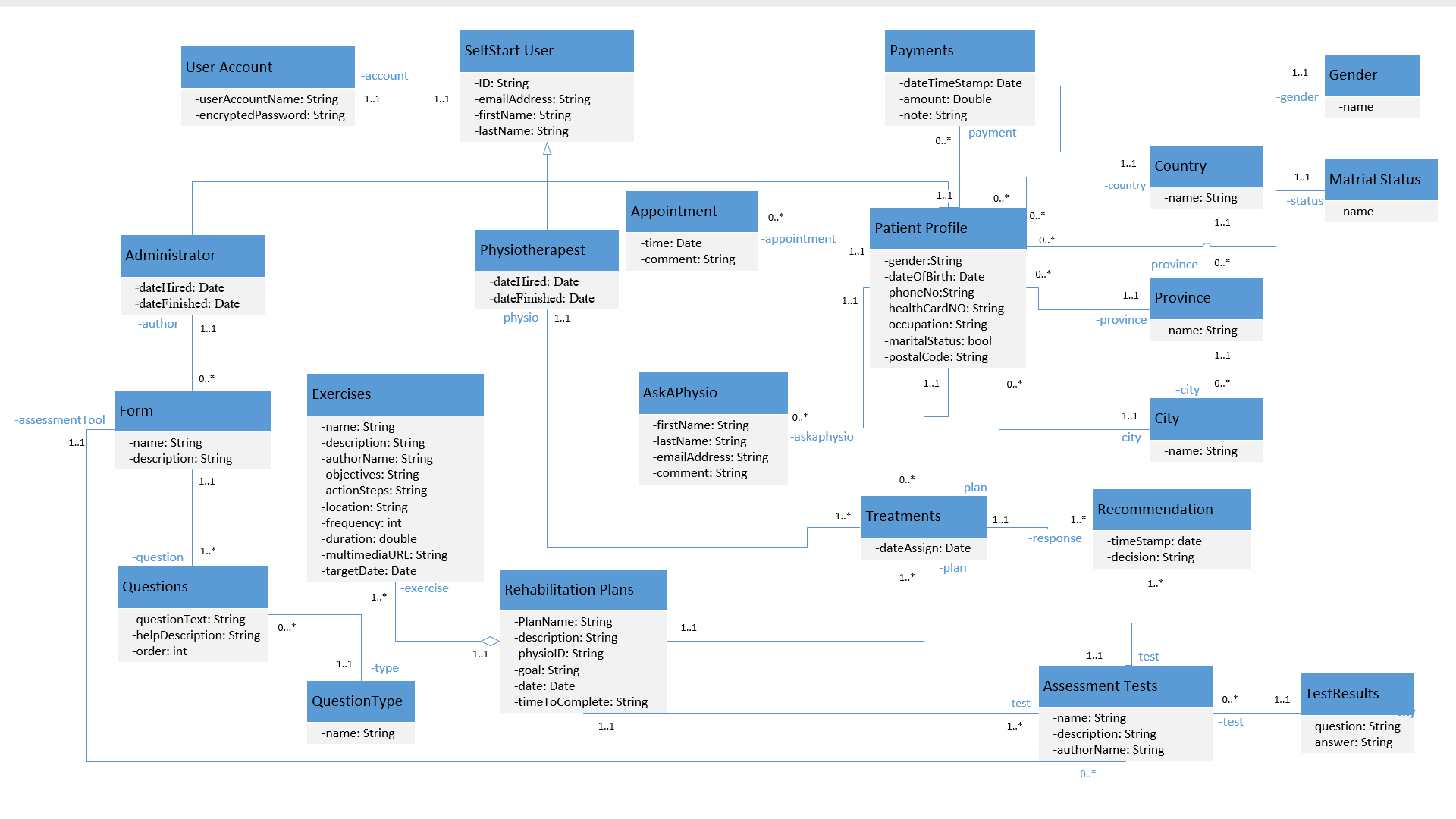
1. **Recommendations Class**

|  |  |  |
| --- | --- | --- |
| Attribute name | Type | Brief Description |
| timeStamp | Date | The date attribute stores the date the recommendation was assigned. |
| decision | string | The description of the recommendation |

1. **Test Results Class**

|  |  |  |
| --- | --- | --- |
| Attribute name | Type | Brief Description |
| question | string | Holds the questions |
| answer | string | Holds the answer to the corresponding question |

# Classes Diagram



-familyName

-givenName