قرارداد عملیات سیستم

سامان اسلامی نظری (810199375) - پاشا براهیمی (810199385) - میثاق محقق (810199484)

تعریف بسته درمانی

Contract: AddTherapeuticalProcess

Operation:	AddTherapeuticalProcess(OrgUser ou, string name, string description, WorkField field)
Cross References:	Use Cases: تعریف بسته درمانی [مورد 3 سناریوهای فرعی]
Preconditions:	- An instance of `OrgUser` should be present as `ou`. - The organization account should be verified. In other words, `ou.is_verified` should be true. - The system should verify that the general rules match the system's terms and conditions. - The SaPaMi committee should confirm the addition of the process.
Postconditions:	- A `TherapeuticalProcess` instance such as `tp` is created. - `tp` attributes such as name, description, and field are set to the corresponding parameters.

Contract: AddTherapeuticalPackage

Operation:	AddTherapeuticalPackage(OrgUser ou, TherapeuticalProcess tp, string name, time required_time, decimal approximate_price, Doctor doctor)
Cross References:	Use Cases: تعریف بسته درمانی [مورد 2 تا 10 سناریوی اصلی]

Preconditions:	- An instance of `OrgUser` should be present as `ou`.
	- The organization account should be verified. In other words, `ou.is_verified` should be true.
	- A `TherapeuticalProcess` instance as `tp` should exist in the system.
	- The hospital/clinic's field should match with `tp.field`.
	- The `required_time` and `approximate_price` fields should be rational according to the values defined in the system.
	- `doctor` should be in the verified doctor's list in ou's account.
Postconditions:	- A `TherapeuticalPackage` instance as `tp` is created.
	- `tp` is associated with the corresponding instance of `Health Center`.
	- `tp` is associated with `doctor` instance of `Doctor`.
	- `tp` attributes such as name, required_time, and approximate_price are set to the corresponding parameters.

Contract: VerifyOrganiztionAccount

Operation:	VerifyOrganizationAccount(OrgUser ou, List<Document> documents)
Cross References:	Use Cases: تعریف بسته درمانی [موارد 1 و 2 از سناریو فرعی دوم]
Preconditions:	- An instance of `OrgUser` should exist as `ou`.
	- `ou` should not be already verified. In other words, `ou.is_verified` should be false.
	- The number of uploaded documents should match the number of required documents.
	- The genuineness of the documents should be verified by the SaPaMi committee.
	- The information in the documents should match the ones which are present in the account's profile.
Postconditions:	- License is attached to the corresponding instance of `Health Center`.
	- Each of the other documents is associated with the

corresponding instance of `Health Center`.
- `ou.is_verified` became true.

Contract: AddDoctor

Operation:	AddDoctor(OrgUser ou, string name, int medical_id, List<Document> documents)
Cross References:	Use Cases: تعریف بسته درمانی [موارد 3 تا 5 از سناریو فرعی دوم]
Preconditions:	- An instance of `OrgUser` should be present as `ou`. - The organization account should be verified. In other words, `ou.is_verified` should be true. - The number of uploaded documents should match the number of required documents. - The genuineness of the documents should be verified by the SaPaMi committee.
Postconditions:	- An instance of `Doctor` is created as `doctor`. - The attributes of `doctor` such as name, medical_id, and license are set to the corresponding parameters. - Other documents are associated with `doctor`. - The related instance of `Health Center` is associated with the `doctor` instance (`doctor` is added to the list of `verified_doctors` in the instance of `Health Center`).

Contract: fillForm

Operation: fillForm(Form prerequisitesForm)

Cross References: Use Cases: درخواست بسته درمانی   [مورد 11 سناریو اصلی]

Preconditions:
- An instance of 'Patient' exists called 'p'.
- 'p' is authorized and logged in.
- An instance of 'TherapeuticalPackage' exists called 'tp'.
- 'tp' is associated with a 'Service' which is in a 'Reservation' with patient 'p'.

Postconditions: For each document in prerequisitesForm:
- An instance of 'Document' was created called 'd'.
- 'd' was associated with 'p'.
- d.type was set to the type of the uploaded document.
- d.data became the uploaded data.
- d.is_confirmed was set to false.

Contract: verifyForm

Operation: verifyForm()

Cross References: Use Cases: درخواست بسته درمانی   [مورد 12 سناریو اصلی]

Preconditions:
- An instance of 'Patient' exists called 'p'.
- There exists a document 'd' associated with 'p' which is not verified (d.is_confirmed is false).
- There exists a 'TherapeuticalPackage' instance called 'tp' and its corresponding 'Service' which is associated with the reservation of patient 'p'.

Postconditions: For each Document 'd' meeting the preconditions criteria:

- d.data was checked for validity.
- d.data and d.type was checked to be part of tp.prerequisites.
- d.is_confirmed was set to true.

Then:

- An email was sent to p.email which says the verification process is done and [if incomplete] states the parts that need re-doing.

Contract: requestPackage

Operation: requestPackage(TherapeuticalPackage pkg)

Cross References: Use Cases: درخواست بسته درمانی [مورد 6 سناریو اصلی]

Preconditions:
- An instance of 'Patient' exists called 'p'.
- 'p' is authorized and logged in.
- An instance of 'Reservation' exists called 'r' which is associated with 'p'.
- An instance of 'Bill' exists called 'b' which is associated with 'r'.

Postconditions:
- A 'TherapeuticalPackageService' instance 'tps' was associated with 'r'.
- tps.reservation_date was set to the current date.
- 'tps' was associated with the TherapeuticalPackage pkg.
- An instance of 'ServiceRecord' was created called 'sr' associated with 'tps'.
- sr.cost was set to pkg.approximate_price.
- sr.paid was set to 0.
- b.total_cost was updated to add the package cost.

Contract: pay

Operation: pay(int percentage)

Cross References: Use Cases: درخواست بسته درمانی   [مورد 19 تا 26 سناریو اصلی]

Preconditions:
- An instance of 'Patient' exists called 'p'.
- 'p' is authorized and logged in.
- An instance of 'CreditCard' exists which is associated with 'p'.
- An instance of 'Bill' exists called 'b' which is associated with a 'Reservation' of 'p'.
- b.total_cost is more than b.total_paid

Postconditions:
- An instance of 'Payment' was created called 'pym' associated with 'b'.
- pym.date was set to the current time.
- pym.amount was set to the percentage of b.total_cost.
- pym.reference_id became the ID for the online payment receipt.
- b.total_paid was updated.

Contract: addDocsToPatientsFile

Operation:	addDocsToPatientsFile(List[Doc] docsList)
Cross References:	Use Cases: الصاق خدمات به پرونده بیمار [مورد 10 سناریو اصلی]
Preconditions:	- The health expert is authenticated. - The user has pending service expenses.
Postconditions:	- The user's expense documents were submitted. - The expenses were added to the user account. - The selected user service's status is changed to "pending for accounting confirmation".

Contract: confirmDocsByAccounting

Operation:	confirmDocsByAccounting(List[Doc] docsList)
Cross References:	Use Cases: الصاق خدمات به پرونده بیمار [مورد 11 سناریو اصلی]
Preconditions:	- The health expert is authenticated. - The health expert has uploaded documents. - The selected user has some pending service expenses with the status "pending for accounting confirmation".
Postconditions:	- The user's expense documents were confirmed to pay. - The expenses were added to the user account. - The selected user service's status is changed to "pending for user acceptance".

Contract: confirmExpensesByUser

Operation:	confirmExpensesByUser(List[Doc] docsList, int totalCost)
Cross References:	Use Cases: الصاق خدمات به پرونده بیمار [مورد 14 سناریو اصلی]
Preconditions:	- The user has some pending service expenses with the status "pending for user acceptance".
Postconditions:	- The expenses were added to the user's account. - The expenses status was changed to "settled".