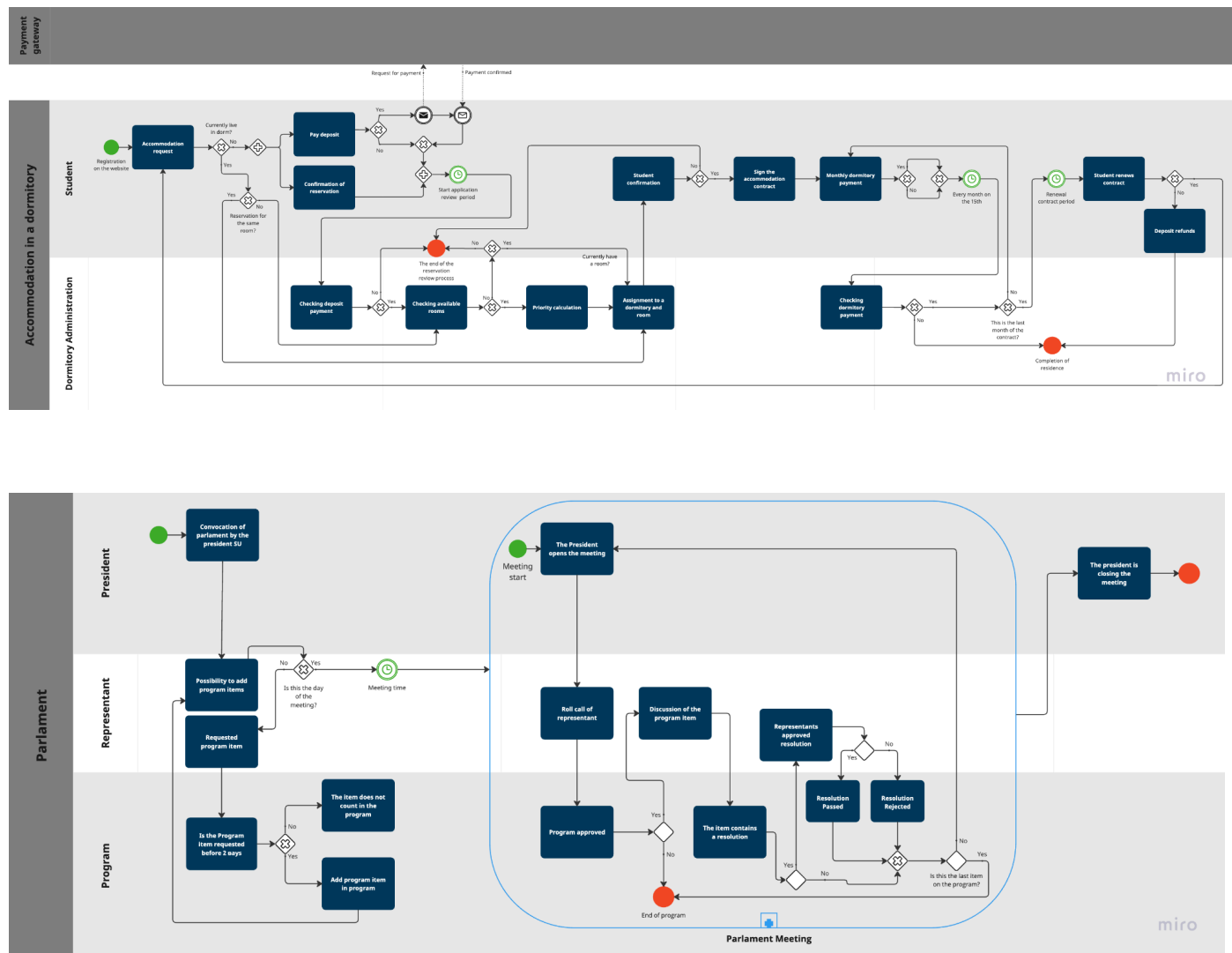


Dormitory Administration and Student Union

1. BPMN model



2. DEMO models

2.1. Extended TPT

ID (of transaction kind)		T01
Transaction kind		Dormitory Application
Product kind		Accommodation Request
Initiator (actor role)		Student
Executor (actor role)		Dormitory Admin
Order	Request	Student submits an accommodation request via the website.
	Promise	If deposit is paid, the Admin promises to process the request.
	Decline	Admin rejects invalid requests if eligibility criteria are unmet (e.g., deposit unpaid).
Results	Declare	Admin marks the request as paid, advancing its stage, and sends a summary/recap to the student
	Accept	The student confirms and approves the document
	Reject	The student rejects the document
Revoke	Revoke-rq	Student may withdraw the application before the review period ends.
	Revoke-pm	Student does not pay the deposit, revoking the request automatically.
	Revoke-da	Not applicable
	Revoke-ac	The student changes their mind after the application is accepted and decides not to proceed with the accommodation process.

ID (of transaction kind)		T02
Transaction kind		Deposit Payment
Product kind		Payment Confirmation
Initiator (actor role)		Student
Executor (actor role)		Payment Gateway
O r d e r	Request	Student initiates payment for a deposit.
	Promise	Payment Gateway processes the payment.
	Decline	Gateway declines the payment if insufficient funds or invalid payment details.
R e s u l t	Declare	Payment Gateway confirms payment.
	Accept	Dormitory Admin updates application status upon confirmation.
	Reject	Not applicable
R e v o k e s	Revoke-rq	Student cancels the payment before confirmation.
	Revoke-pm	Not applicable
	Revoke-da	Not applicable
	Revoke-ac	Not applicable

ID (of transaction kind)		T03
Transaction kind		Room Allocation
Product kind		Dormitory Assignment
Initiator (actor role)		Dormitory Admin
Executor (actor role)		System
Order	Request	Admin triggers room allocation process for eligible applicants.
	Promise	System ensures allocation respects student priority and room availability.
	Decline	The system fails the room allocation process (E.g., due to a technical issue)
Results	Declare	System calculates priority and assigns rooms accordingly.
	Accept	Student confirms the assignment by signing the accommodation contract.
	Reject	Admin informs students that no rooms are available, effectively rejecting the application.
Revoke	Revoke-rq	If priority is too low and no rooms are available, student effectively loses the opportunity.
	Revoke-pm	Not applicable
	Revoke-da	Not applicable
	Revoke-ac	Not applicable

ID (of transaction kind)		T04
Transaction kind		Contract Management
Product kind		Accommodation Contract
Initiator (actor role)		Dormitory Admin
Executor (actor role)		Student
O r d e r	Request	Admin provides the student with the contract for the assigned dormitory.
	Promise	Student promises to comply with the dormitory rules and payment schedule.
	Decline	Student rejects the contract
R e s u l t	Declare	Student signs the contract.
	Accept	Contract remains valid for the academic year.
	Reject	Admin rejects the signed contract.
R e v o k e s	Revoke-rq	Not applicable
	Revoke-pm	Not applicable
	Revoke-da	Student does not pay dorm fees on time.
	Revoke-ac	Admin may revoke the contract if the student fails to pay dorm fees.

ID (of transaction kind)		T05
Transaction kind		Monthly Payments
Product kind		Monthly Dormitory Payment
Initiator (actor role)		Dormitory Admin
Executor (actor role)		Student
O r d e r	Request	Dormitory Admin notifies the student about upcoming payments (recurring act).
	Promise	Student ensures regular payment to maintain dormitory residency.
	Decline	Dormitory Admin declines payment if received after contract termination or if the amount is wrong.
R e s u l t	Declare	Payment is received and recorded.
	Accept	(Not applicable, periodic and requires no explicit declaration after each cycle.)
	Reject	Admin terminates the dormitory contract if the student fails to pay on time repeatedly.
R e v o k e s	Revoke-rq	Dormitory Admin may terminate residence for non-payment.
	Revoke-pm	Not applicable
	Revoke-da	Not applicable
	Revoke-ac	Not applicable

2.1. OCD

