1. Constituição do Grupo G13_2DC:

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2. Diagrama de Modelo de Domínio:

- Encontra-se anexado na pasta 2DC_G13_M1, com o nome domain_model.svg

3. Glossário:

Term	Description
Address	A value object that represents the address of a Customer, including street, postal code, city, and country.
Admin	A system role with the highest level of access, responsible for managing users, system configurations, and platform-wide operations.
AggregateRoot	A special type of entity that acts as the entry point to an aggregate, ensuring the consistency of changes within that aggregate.
Category	A value object that represents the category classification of a Figure.
CollisionEvent	Entity that logs a drone collision during simulation, including the 3D position, involved drones, and time step.
CRM	Acronym for Customer Relationship Management.
CRM Collaborator	A user role that assists CRM Managers by managing customer data, representatives, and show requests.
CRM Manager	A user role responsible for overseeing customer relationships and managing customer accounts and requests.
Customer	An entity that represents a client of Shodrone.
Customer Id	A value object that uniquely identifies a Customer within the system.
Customer Management Service	Application service responsible for managing customer-related operations, such as registration and status changes.
Customer Priority Service	Domain service that defines priority rules between customers, e.g., giving precedence to VIP clients over Regular ones.
Customer Representative	An entity representing an individual (employee or representative) associated with a Customer.
CustomerName	A value object encapsulating the name of a Customer with validation logic.
Customer Repository	Interface to perform persistence operations on Customer entities, such as find by VAT number and save.
Customer Relationship Management	The full form of CRM, representing the tools and practices used to manage customer interactions.
CustomerStatus	An enumeration that defines a Customer's state: Created, Regular, VIP, Infringement, Deleted.
Drone	An entity representing a physical drone, with serial number, model, acquisition date, and maintenance history.
DroneAvailabilityService	Domain service responsible for checking drone availability when scheduling a show.
DroneConfiguration	A value object specifying how many drones of a given model are used for a FigureElement.
DroneCount	A value object representing the number of drones requested for a show.
DroneId	A value object identifying a unique Drone in the system.
DroneInventoryService	Domain service managing the addition, repair marking, and maintenance scheduling of drones.
DroneMaintenance	Entity recording a drone's maintenance operation, including type (preventive or repair), description, and next date.
DroneMaintenanceId	Value object uniquely identifying a DroneMaintenance entry.
DroneModel	A value object that defines the model of a drone, relevant for compatibility checks.
Drone Repository	A repository interface for managing Drone entities, including search by status, availability, and ID.
DroneStatus	Enum representing a drone's state: ACTIVE, IN_REPAIR, or DECOMMISSIONED.
DroneTech	A system user role responsible for configuring drones, maintaining inventory, generating simulation data, and handling drone-related technical operations.
DSL Plugin	Plugin that analyses and validates the syntax of a Figure's DSL description.
DSLCode	A value object representing the high-level DSL code used to describe a Figure, imported from an external tool.
Email	A value object representing a user's email address, with validation.
Email Representative	A value object for representing a Customer Representative's email, with validation.
ElementId	A value object uniquely identifying a FigureElement.
ElementType	Enum describing the type of element in a Figure: GEOMETRIC or 3D BITMAPS.
Entity	A domain object identified by its unique identity rather than its attributes.
Figure	An aggregate root representing a drone figure used in a show. It may have multiple versions based on different DSL codes.
FigureCode	Value object containing a unique identifier for a Figure.

FigureElement	Entity describing an element of a FigureVersion, with a type, movements, and drone configuration.
Figure Management Service	Application service for managing figures, including creation and validation of exclusivity and DSL.
Figure Repository	Interface for data access operations on Figure entities.
Figure Total Drone	Value object that records the total number of drones used in a FigureVersion.
Figure Type	Enumeration describing a figure version as STATIC (fixed positions) or DYNAMIC (movement).
Figure Version	An entity representing a specific implementation/version of a Figure.
Figure Version Ref	A value object referencing a specific version of a Figure used in a Show.
Framework	A reusable set of libraries/tools to structure application development, e.g., Spring or Hibernate.
Hibernate	A Java ORM framework implementing JPA for database interaction via objects.
Java Persistence API	A specification that defines ORM operations in Java.
JPA	Acronym for Java Persistence API.
Keyword	A value object used for categorizing Figures with searchable keywords.
MaintenanceType	Enum indicating whether a drone maintenance is PREVENTIVE or REPAIR.
Movement	Enum describing types of movements for drones: ROTATION or TRANSLATION.
Object Relational Mapping	Technique for mapping between object-oriented languages and relational databases.
ORM	Acronym for Object Relational Mapping.
Password	A value object representing a secure password with validation.
Place	A value object indicating the location of a show request, including address, city, and country.
Position3D	Value object representing a spatial coordinate (x, y, z) used in simulation.
ProposalStatus	Enum defining the current state of a ShowProposal: DRAFT, FINALIZED, ACCEPTED, or REJECTED.
ProposalTemplateId	Value object identifying the template used to generate a ShowProposal.
ProposalTotalDrone	A value object specifying the total number of drones proposed for a show.
RepresentativeStatus	Enum defining whether a Customer Representative is ACTIVE or DISABLED.
Repository	A design pattern that abstracts the data access layer, providing methods to retrieve and persist domain entities.
Role	Enum listing the roles a system user can have: ADMIN, CRM_MANAGER, etc.
Service	A design pattern that encapsulates domain logic not naturally belonging to an entity or value object.
Shodrone	A company that provides customised multimedia drone shows, using programmable UAVs.
Show	An entity and aggregate root representing a scheduled or completed drone show.
ShowDateTime	Value object containing both date and time of a scheduled show.
ShowDescription	Value object providing descriptive information about a requested show, including document references and exclusivity requirements.
ShowDuration	Value object specifying the intended duration of a show in minutes.
Show Designer	A user role responsible for creating and updating Figures based on customer requests, ensuring they meet the show requirements and technical constraints.
ShowId	Value object uniquely identifying a Show entity.
ShowProposal	Entity containing the final proposal details for a show, including figures, video preview, and total drones.
ShowProposalId	Value object uniquely identifying a ShowProposal.
ShowRequest	Entity representing a customer's request for a new show, including drone count, desired date, and requested figures.
ShowRequestId	Value object uniquely identifying a ShowRequest.
ShowRequest Repository	A repository interface for storing and retrieving ShowRequest entities based on customer, ID, or request status.
ShowRequestStatus	Enum tracking the lifecycle of a show request: SUBMITTED, DESIGNER_ASSIGNED, PROPOSAL_READY, etc.
ShowSchedulingService	Domain service responsible for turning accepted proposals into scheduled shows.
ShowStatus	Enum indicating a show's current status: SCHEDULED, IN_PROGRESS, COMPLETED, CANCELED.
Simulation	Entity representing a test simulation of a show or figure, including volume, collisions, and success result.
SimulationId	Value object uniquely identifying a Simulation.
SimulationResult	Entity storing the results of a simulation, including any detected collisions.
Simulation Repository	A repository interface responsible for storing and querying simulation data, such as simulations by ID or target type.
SimulationService	Domain service to run simulations for Figures and Shows, detecting possible collisions.
SimulationTarget	Enum indicating whether a simulation is run for a Figure or a Show.
SimulationTargetRef	Value object encapsulating a simulation target, with logic to determine target type and ID.
SimulationVolume	Value object defining the 3D space where simulation takes place, including dimensions and resolution.
User	An entity representing a system user, uniquely identified by an email.
User Repository	Interface for managing persistence of User entities.
UserStatus	An enumeration indicating whether a user is Active or Inactive.
UserId	A value object uniquely identifying a User in the system.
ValueObject	An immutable object defined solely by its attributes and without a unique identity.
VATNumber	A value object representing the customer's VAT identification number.
Video	A value object containing the path or identifier for a video simulation preview included in a proposal.

4. Avaliação Inter-Pares

Contribuição (0-5)	1220849	1230443	1230540	1230978	1231500
1220849	-	5	5	5	5
1230443	5	-	5	5	5
1230540	5	5	-	5	5
1230978	5	5	5	-	5
1231500	5	5	5	5	-

5. Declaração de Compromisso de Honra

Declaro, em nome do grupo, que todo o trabalho realizado foi feito por nós, sem recurso a plágio, respeitando os princípios de integridade académica.

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Turma: 2DC

Grupo: G13