















1. Data Dictionary




Entity Name	Entity Description						
Column Name	Column Description	Data Type	Length	Primary Key	Nullable	Unique	
 Alert	An alert that is raised when something urgent occurs. All the users will be able to view this information.						
AlertID	Alert Unique Identifier.	varchar	10	true	false	true	
AlertMessageContent	Alert message content.	varchar	255	false	false	false	
LaunchByUserID	The unique identifier of the user who launched this alert.	varchar	10	false	false	false	
SentByUserID	The unique identifier of the user who created this alert.	varchar	10	false	false	false	
 AnnualInventoryDeclaration	The Annual Inventory Declaration						
AnnualInventoryDeclarationContent	The content of it.	varchar	255	false	false	false	
AnnualInventoryDeclarationID	AnnualInventoryDeclaration Unique Identifier	varchar	10	true	false	true	
ApprovedByUserID	The unique identifier of the user who approved it.	varchar	10	false	false	false	
SubmittedByUserID	The unique identifier of the user who submitted it.	varchar	10	false	false	false	
 Apiary	The apiary where the beekeepers work.						
ApiaryID	Apiary Unique Identifier.	varchar	10	true	false	true	
TotalBees	Total number of bees in all the apiary.	integer	10	false	false	false	
ZoneID	The unique identifier of the zone where the apiary is.	varchar	10	false	false	false	
 ApiaryCertification	Certification that is valid to some apiary.						
ApiaryCertificationID	ApiaryCertification Unique Identifier.	varchar	10	true	false	true	
ApiaryID	The certified apiary unique identifier.	varchar	10	false	false	false	
CertificationID	The certification unique identifier.	varchar	10	false	false	false	
EndDate	When the certification expires.	date	0	false	false	false	
StartDate	When the certification is valid	date	0	false	false	false	



Entity Name	Entity Description					
AppointmentDate	The Date and Time of the Appointment	date	0	false	false	false
AppointmentID		varchar	10	true	false	true
AppointmentStatus	Status of the appointment. Pending, Rejected, Accepted.	varchar	10	false	false	false
 AppointmentParticipant	Keep track of all the participants on a certain appointment.					
AppointmentID	The unique Identifier of the appointment itself.	varchar	10	false	false	false
ParticipantID	The unique identifier of a user that needs to be present on the appointment.	varchar	10	false	false	false
 Beekeeper	A specific type of User, Beekeeper					
UserID	Unique Identifier of the beekeeper.	varchar	10	true	false	false
 BeekeeperApiary	Keep track of all the apiaries on a certain beekeeper.					
ApiaryApiaryID		varchar	10	false	false	false
BeekeeperUserID		varchar	10	false	false	false
 BeekeeperCertification	Certification that is valid to some Beekeeper.					
BeekeeperCertificationID	BeekeeperCertification Unique Identifier.	varchar	10	true	false	true
BeekeeperUserID	Unique Identifier of the Beekeeper that's being certified.	varchar	10	false	false	false
CertificationID	The Unique Identifier of the certification being applied.	varchar	10	false	false	false
EndDate	When the certification expires.	date	0	false	false	false
StartDate	When the certification is valid	date	0	false	false	false
 BeekeeperCertificationError	Errors that might came up during certification process.					
BeekeeperCertificationErrorID	BeekeeperCertificationError Unique Identifier.	varchar	10	true	false	true
BeekeeperCertificationID		varchar	10	false	false	false
ErrorDescription	Error description.	varchar	255	false	false	false
ErrorType	Type of error. It can be Minor, Bad or Extreme.	varchar	10	false	false	false
 Certification	A certification that will be applied to an apiary.					

Entity Name	Entity Description					
CertificationDescription	The complete description of the certification including requirements and explanation.	varchar	255	false	false	false
CertificationID	Certification Unique Identifier	varchar	10	true	false	true
CertificationType	Certification type.	varchar	10	false	false	false
ExpirationTime	How long does the certification lasts.	time	7	false	false	false
 CertificationRequest	A request that's made when you want to certify an apiary.					
ApiaryID	The unique identifier of the apiary that will possibly be certified.	varchar	10	false	false	false
CertificationID	Unique Identifier of the certification that's being requested.	varchar	10	false	false	false
CertificationRequestID	CertificationRequest Unique Identifier	varchar	10	true	false	true
CertificationStatus	Status of the Certification. Pending, Rejected, In Progress and Approved.	varchar	10	false	false	false
RequestedUserID	Unique Identifier of the Beekeeper who asks for the certification.	varchar	10	false	false	false
 Fine	Some sessions might result in fines.					
ApiaryID	The apiary that created this fine.	varchar	10	false	false	false
Cost	Cost of the fine.	double	10	false	false	false
FineID	Fine unique identifier.	varchar	10	true	false	true
Motive	Motive of the fine.	varchar	255	false	false	false
PaymentMethods	Payment methods are described here.	varchar	255	false	true	false
SessionResultID	Session Result where the fine was brought up.	varchar	10	false	false	false
 Handle	A compartment of the Hive where bees live.					
HandleID	Handle unique identifier.	varchar	10	true	false	false
HiveID		varchar	10	false	false	false
TotalBees	Number of bees in the Handle	integer	10	false	false	false
 Hive	A hive that contains bees.					
ApiaryID	The unique identifier of the Apiary where the Hive is located.	varchar	10	false	false	false
HiveID	Hive Unique Identifier.	varchar	10	true	false	true

Entity Name	Entity Description					
HiveType	The type of Hive. Colmeia, núcleo ou cortiço.	varchar	10	false	false	false
TotalBees	Total number of bees in this hive.	integer	10	false	false	false
 Inspection	Inspection that will be done in some Hive.					
BeekeeperUserID	Unique Identifier of the Beekeeper.	varchar	10	false	false	false
Date	Dater of the inspection.	date	0	false	true	false
HiveID	Unique Identifier of the Hive being inspected.	varchar	10	false	false	false
InspectionID	Unique Identifier of the Inspection	varchar	10	true	false	false
 Message	A message that a user can send another.					
MessageContent	The message text.	varchar	255	false	true	false
MessageID	Message Unique Identifier.	varchar	10	true	false	true
ReceivedByUserID	The unique identifier of the user who received this message.	varchar	10	false	false	false
SentByUserID	The unique identifier of the user who sent this message.	varchar	10	false	false	false
 Note	A note that a beekeeper can write down about an hive.					
InspectionID	Unique Identifier of the Inspection that resulted in this note.	varchar	10	false	false	false
NoteContent	Content of the note.	varchar	255	false	false	false
NoteID	Note Unique Identifier.	varchar	10	true	false	true
 Product	A product that exists in a apiary.					
CautionText	Care that must be taken with the product.	varchar	255	false	false	false
Cost	Cost of the product.	double	10	false	false	false
Description	Product description.	varchar	255	false	true	false
Name	Product name.	varchar	15	false	false	false
ProductID	Product unique identifier.	varchar	10	true	false	true
ProductType	Type of product	varchar	10	false	false	false
 SanitaryLock	When we need to lock a certain apiary in a certain zone due to some issues. e.g. diseases and bad weather					
AdditionalComments		varchar	255	false	true	false
ApiaryID	The unique identifier of the apiary affected.	varchar	10	false	false	false
SanitaryLockID	SanitaryLock Unique Identifier.	varchar	10	true	false	true

Entity Name	Entity Description					
ZoneID	The unique identifier of the zone affected.	varchar	10	false	false	false
 Session	The session itself.					
AppointmentID	The unique identifier of the appointment that created this session.	varchar	10	false	false	false
SessionCost	Cost of the session.	double	10	false	true	false
SessionEndTime	Timestamp of the session end.	timestamp	0	false	false	false
SessionID		varchar	10	true	false	true
SessionStartTime	Timestamp of the session start.	timestamp	0	false	false	false
SessionStatus	Status of the session. Pending, Rejected, In Progress and Done.	varchar	10	false	false	false
SessionType	The type of the session. It can be a certification company inspection, DGAV intervention or management entities inspection.	varchar	10	false	false	false
 SessionResult	The result of the session that might end up turning into a report.					
AdditionalComments		varchar	255	false	true	false
Conclusion	Conclusion of the session.	varchar	255	false	false	false
Files	Files that might be good to keep here such as photos or recorded data.	blob	0	false	true	false
Resume	Resume of the work done.	varchar	255	false	false	false
SessionDate	Session date.	date	0	false	false	false
SessionID	The session itself unique identifier.	varchar	10	false	false	false
SessionResultID	Session Result Unique Identifier.	varchar	10	true	false	true
Title	The title of the result, might be related to the Session Type.	varchar	20	false	false	false
 Task	A task that can be done by an user, specially the beekeeper.					
BeekeeperAssignedID	Unique ID of the beekeeper assigned to do the task.	varchar	10	false	false	false
CreatedByUserID	The unique identifier of the user who created this task.	varchar	10	false	false	false
TaskComment	A comment about the task.	varchar	100	false	true	false
TaskID	Task Unique Identifier	varchar	10	true	false	true

Entity Name	Entity Description					
TaskStatus	Status of the task. Pending, Rejected, In Progress and Done.	varchar	10	false	false	false
TaskType	The type of task that's being done.	varchar	10	false	false	false
UserIDAssignes	Unique ID of the User who assigned a beekeeper to do the task.	varchar	10	false	false	false
 Treatment	Treatment done in an Hive.					
Date	Date of the treatment.	date	0	false	true	false
HiveID		varchar	10	false	false	false
TreatmentID	Treatment Unique Identifier.	varchar	10	true	false	false
TreatmentNotes	What was done in this treatment.	integer	10	false	true	false
 User	Someone that uses the application.					
Email	Email of the user.	varchar	50	false	false	true
Name	Name of the user.	varchar	50	false	false	false
UserID	User Unique Identifier.	varchar	10	true	false	true
UserType	User Type such as Beekeeper , DGAV technician, Certification Responsible and Technician of the Management Entities of Controlled Areas.	varchar	15	false	false	false
 Zone	A zone that can have apiaries in it.					
City	The city where this zone is located at.	varchar	10	false	false	false
Country	The country where this zone is located at.	varchar	10	false	false	false
TerrainType	Terrain type of this zone such as Mountain, Hill, Forest, Plain, Tundra , Swamp, Desert , Valley, Marsh, Canyon, Plateau, Oasis , Butte, Dune...	varchar	10	false	false	false
xCoordinate	The x coordinate of the zone.	double	10	false	false	false
yCoordinate	The y coordinate of the zone.	double	10	false	false	false
zCoordinate	The z coordinate of the zone.	double	10	false	true	false
ZoneID	Zone Unique Identifier.	varchar	10	true	false	true

Entity Name	Entity Description						
 ZonePermission	Keep track of all the zone permissions by apiary.						
ApiaryID	The unique identifier of the apiary that has permission to be in a certain zone.	varchar	10	false	false	false	
ZoneID	The unique identifier of the zone the apiary has permission,	varchar	10	false	false	false	
ZonePermissionID	ZonePermission Unique Identifier.	varchar	10	true	false	true	
ZonePermissionRequestID	The ZonePermissionRequest Unique Identifier.	varchar	10	false	false	false	
 ZonePermissionRequest	A request that's made when you want the permission to access a zone.						
AcceptedDeclinedByUserID	The unique identifier of the user who accepts/declines the request.	varchar	10	false	false	false	
ApiaryID	The apiary that will be moved to this new zone.	varchar	10	false	false	false	
RequestedByUserID	The unique identifier of the beekeeper that request the zone permission.	varchar	10	false	false	false	
RequestStatus	Status of the zone permission request. Pending, Rejected, In Progress and Accepted.	varchar	10	false	false	false	
ZoneID	The zone in cause.	varchar	10	false	false	false	
ZonePermissionRequestID	ZonePermissionRequest unique identifier.	varchar	10	true	false	true	