+IISY User Guide

About IISY

IISY is an issue reporting system that uses QR-codes as the medium to deliver issues to maintenance personnel.

The general idea for the project is to integrate three components to a working solution. Purpose for it is to create functionality for reporting an issue by scanning a QR-code with a smartphone camera. Scanning a QR-code will open a webpage with a button and when it is pressed, it will send our customer an issue report regarding the entity that the QR-code refers to. Data is stored from each action and we'll integrate our database to a maintenance dashboard. The dashboard is used by the customer to browse issued alerts. It is also possible to integrate a database directly to customer-maintained application through REST API.

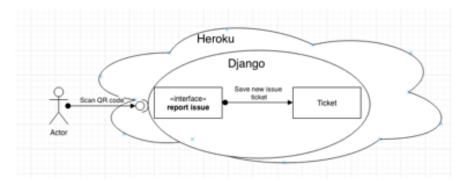
The three components for the IISY service are:

- 1) Smartphone native camera application is used to read a QR-code
- 2) Database for issues
- 3) Web application for viewing the issues

Features

IISY issue reporting system is built upon Django framework using Python. Django provides an easy way to integrate database and server to a working UI solution. Database is built with PostgreSQL.

Hosting is done using Heroku platform which is set up to rebuild the application whenever there is a new version in github version control.



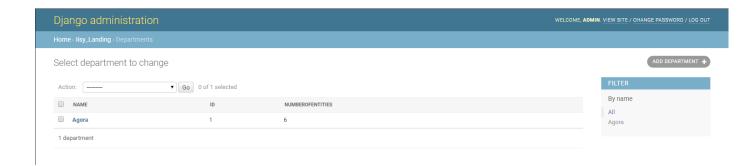
Usage Instructions

By going to the provided URL and logging in using the provided user name and password you will be greeted with this screen

Django administration Site administration IISY_LANDING Change Departments + Add Change **Entity types** + Add **Entitys** + Add Change Change Rooms + Add **Tickets** + Add 🥜 Change

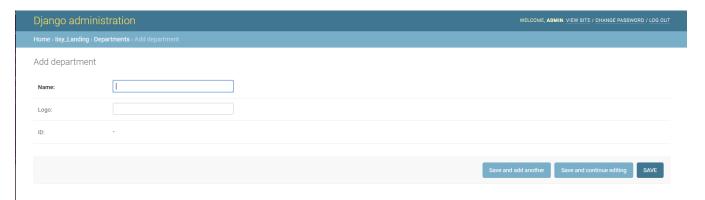
Departments

The first thing you need to do to use our system is create one Department. Think of Departments as a folder containing necessary information pertaining to only that department, building, division, region, etc.



This is the Admin panel for Departments. Here you can see the information on the different Departments you've created.

When pressing the Add department button you will be greeted by this screen:

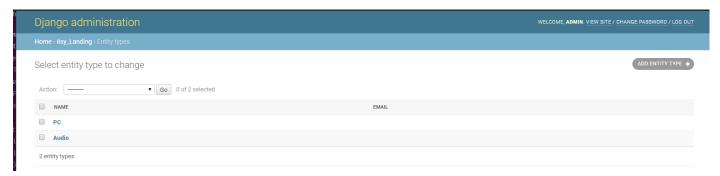


Here you enter the Name for the Department and an URL for the desired Logo you want displayed on the Issue page. After that it's created, and you can start adding Entities or Rooms to it. Only the Name is mandatory, and the ID is created automatically.

You can rename or change the logo for a desired Department by clicking on its Name. You can also delete it by clicking its box and choosing Delete selected departments in the Action list.

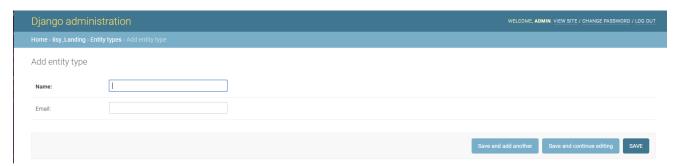
Entity type

Here is where you create your desired Entity types. Think of Entity types as different presets or categories you will use when creating Rooms or Entities. Entity types are not tied to a specific Department.



This is the Admin panel for Entity types. Here you can see the information on the different Entity Types you've created.

When pressing the Add Entity type button you will be greeted by this screen:

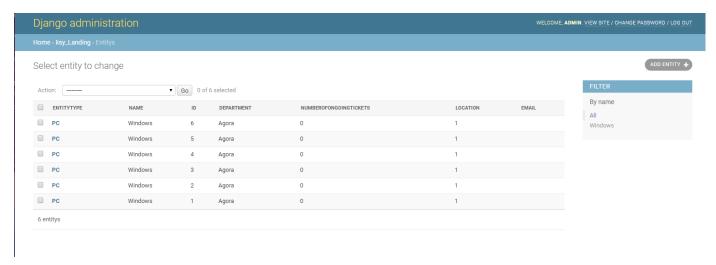


Here you enter the name for the Entity type and its Email address. The Email address will be the default value used when creating Entities or Rooms if their fields are left blank. Only the Name is mandatory. The Email will be the address that receives an email when a Ticket is sent.

You can rename or change the Email address for a desired Entity type by clicking on its Name in the Admin panel. You can also delete it by clicking its box and choosing Delete selected Entity types in the Action list. It is possible to select multiple at once.

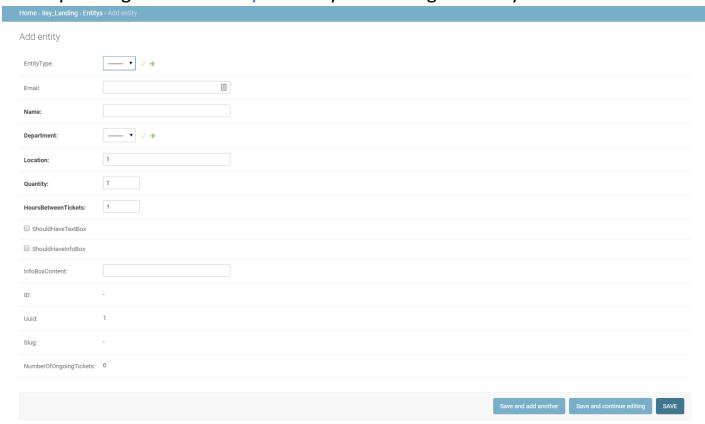
Entity

Here is where you create your desired Entity. Think of an Entity as the device for which you want to create a QR code.



This is the Admin panel for Entities. Here you can see the information on the different Entities you've created.

When pressing the Add Entity button you will be greeted by this screen:



Step by step:

- 1. First step is to select which Entity Type this Entity will belong to. This field is not mandatory, but it is recommended.
- Second, we have the Email field, this Entity will use the Entity
 Type's Email address if you leave it blank or you can input one of
 your own to override it. This field is not mandatory, but it is
 recommended.
- 3. Third, we have the Name of the Entity. This field is mandatory.
- 4. Fourth, we have the Department field. Here is where you select under which Department this Entity should be stored. This field is mandatory.

- 5. Fifth, we have the Location of the Entity. We recommend you leave it as default until you have placed the QR code. After that you can scan it and edit the Location on the spot. This field is mandatory.
- 6. Sixth, we have the Quantity field. This is where you enter how many Entities with this exact information you want to create. This field is mandatory.
- 7. Seventh, we have the HoursBetweenTickets field. This is where you enter the hourly interval that is needed before a new Ticket can be created. Do not input anything less than 0. This field is mandatory
- 8. Eighth, we have the ShouldHaveTextBox field. By marking the box you select whether you want the Report page to display a text box where you can input more information. This field is not mandatory.
- 9. Ninth, we have the ShouldHaveInfoBox field. By marking the box you select whether you want the Report page to display a link with information pertaining the Entity, this could be used to give common troubleshooting tips. This field is not mandatory.
- 10. Tenth, we have the InfoBoxContent field. This is the information that will be displayed if you select the ShouldHaveInfoBox field. This field is not mandatory.
- 11. Eleventh, we have the ID field. This is the number created when the Entity was created, this is only used for identifying which QR code belongs to which Entity. This field is created automatically and can't be changed.
- 12. Twelfth, we have the Uuid field. This is the randomized field that is used to create the Slug field. This field is created automatically and can't be changed.

- 13. Thirteenth, we have the Slug field. This is the URL that is created for the Entity. This URL is used to create the QR code linking to the Entity's Reporting page. This field is created automatically and can't be changed.
- 14. Fourteenth, we have the NumberOfOngoingTickets field. This is the field reporting the number of active Tickets linked to the Entity. This field is created automatically and changes automatically.

You can edit a desired Entity by clicking on its EntityType in the Admin panel . You can also delete it by clicking its box and choosing Delete selected Entity in the Action list. To create the QR code for an Entity you click its box and choose Make qr codes for selected devices in the Action list. It is possible to select multiple at once.

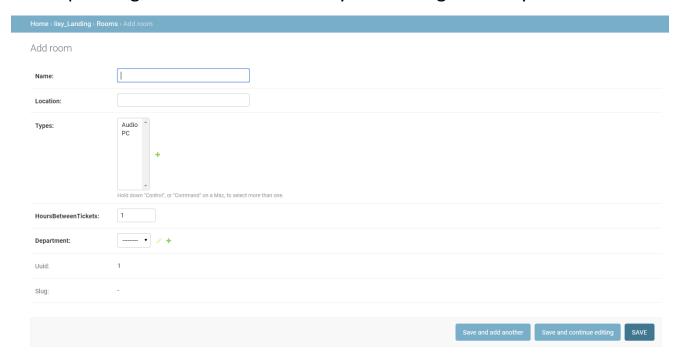
Room

Here is where you create your desired Room. Think of a Room as an Entity filled with multiple Entity Types. You can use a Room instead of an Entity if you have a room filled with multiple different devices but you don't want to create an Entity for every single one.



This is the Admin panel for Rooms. Here you can see the information on the different Rooms you've created.

When pressing the Add Room button you will be greeted by this screen:



This works much like when creating an Entity.

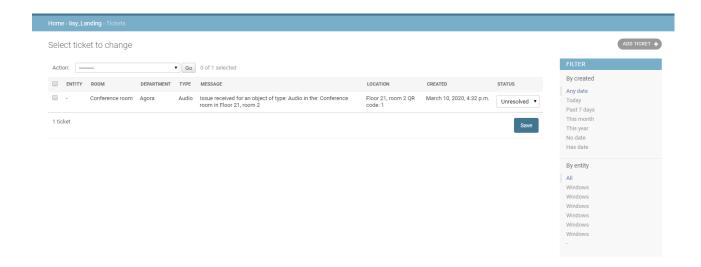
- 1. First you enter the Name of the room. This field is mandatory.
- Second, we have the Location of the Room. We recommend you leave it as default until you have placed the QR code. After that you can scan it and edit the Location on the spot. This field is mandatory.
- 3. Third, we have the Types field. This is where you select which Entity types exist inside this Room. This field is mandatory.
- 4. Fourth, we have the HoursBetweenTickets field. This is where you enter the hourly interval that is needed before a new Ticket can be created. Do not input anything less than 0. This field is mandatory.
- 5. Fifth, we have the Department field. Here is where you select under which Department this Entity should be stored. This field is mandatory.

- 6. Sixth, we have the Uuid field. This is the randomized field that is used to create the Slug field. This field is created automatically and can't be changed.
- 7. Eighth, we have the Slug field. This is the URL that is created for the Entity. This URL is used to create the QR code linking to the Entity's Reporting page. This field is created automatically and can't be changed.

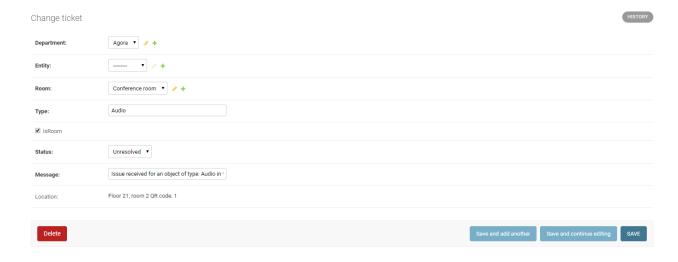
You can edit a desired Room by clicking on its Name in the Admin panel . You can also delete it by clicking its box and choosing Delete selected Room in the Action list. To create the QR code for an Room you click its box and choose Make qr codes for selected rooms in the Action list. It is possible to select multiple at once.

Tickets

Here is where the Tickets for the Entities and Rooms are stored. They are created automatically by your users. Their information will be stored here and if you entered an Email for the Room or Entity you will also receive the information it as an email.



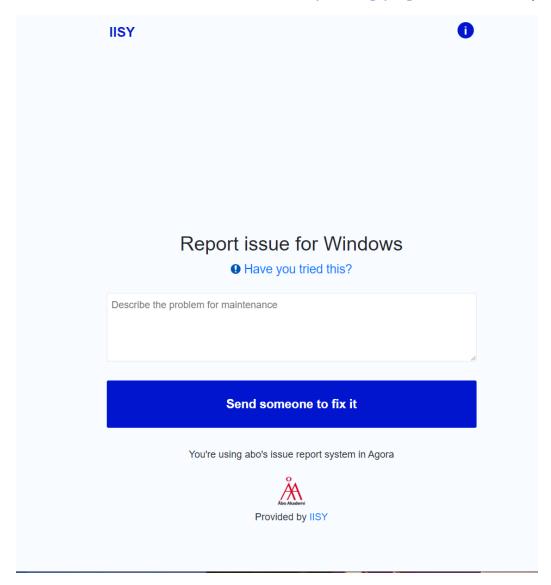
This is the Admin panel for Tickets. Here you can see the information of the different Tickets created. You can click the Entity of the Ticket and you will see more of its information.



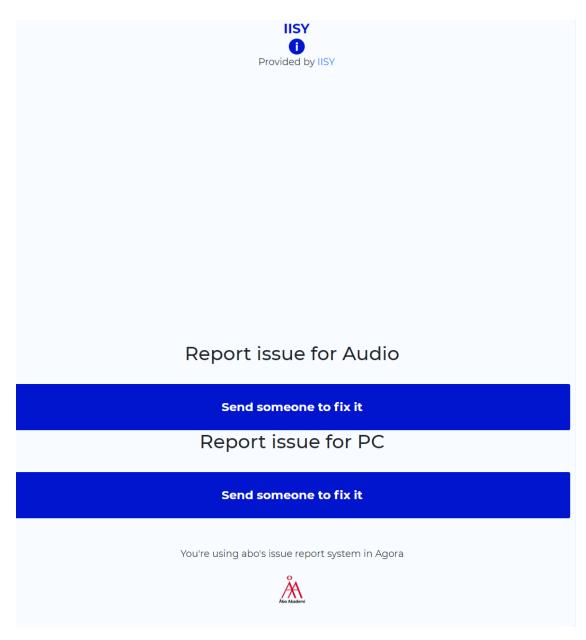
You can edit the Ticket but changing anything but the Status isn't recommended.

Report page

The Report page is what your users interact with. It is automatically created for the Entity or Room you create and the URL is the Slug field. When a User scans a QR code a Reporting page like this is opened:



This is a Reporting page that is created when you create an Entity with ShouldHaveTextBox and ShouldHaveInfoBox enabled. What the User enters in the Text box is what you will see in the Message field for the Ticket, you will also receive the message in an email if you entered one.



This is a Reporting page for a Room that was created with an Audio type and a PC type. If the Audio button is clicked then the Ticket will use the Email from Audio type to send an email with a message.