



IoT for Marketing and Sales

Use case description

Today's digital-savvy customer demands solutions at the click of a button. What they don't necessarily anticipate is smooth, personalized assistance along the way. This is where these application can delight them, using more intelligent customer service technology.

Problem being solved

Read/Parse requirements from
Request for Quotation
Tender documents
Customer clarifications

Identify and Extract
Product / Equipment / System names
Identify matching products/solutions from product catalogs
containing data

Solution workflow

1. Sample document will be submitted through Django Web application on an authorised page which will display after login.
1. File upload function will initiate document parser to extract the keywords from the document.
1. Based on these keywords product documents will be searched from the product document library and auto reply message/mail/notification will be generated with the link(s) of searched document.

Solution approach and architecture

- Request for Quotation
- Tender documents
- Customer clarifications



Technology/Tool/Cloud Stack

- Django version 2.1.2
- Python 3.6
- python-docx
- PDFMiner
- SQLite 2
- firebase
- Apache Solr 6.2.1

Technology/Tool/Cloud Stack

Build steps-

1. Activating virtual env

```
$ pip install virtualenv.
```

```
$ virtualenv --version.
```

```
$ cd Django Sales Document upload App.
```

```
$ virtualenv -p /usr/bin/python3.6 python3.6.
```

```
$ export VIRTUALENVWRAPPER_PYTHON=/usr/bin/python3.6.
```

```
$ source my_project/bin/activate.
```

2. Executing project

```
$ python source/manage.py migrate.
```

```
$ python source/manage.py runserver
```

REFERENCES

- <https://python-docx.readthedocs.io/en/latest/>
- <https://github.com/euske/pdfminer>
- <https://medium.com/@rqaiserr/how-to-convert-pdfs-into-searchable-key-words-with-python-85aab86c544f>
- <https://github.com/axelpale/minimal-django-file-upload-example>

Demonstration screens

[Home](#) [Log in](#) [Create an account](#)

Log in

Username

Password

☐ Remember me

[Enter](#)

- [Forgot the password?](#)
- [Forgot the username?](#)
- [Resend an activation code](#)

Create an account

Username

Required. 150 characters or fewer. Letters, digits and @/./+/-/_ only.

First Name

Optional.

Last Name

Optional.

Email

Required. Type a valid email address.

Password

- Your password can't be too similar to your other personal information.
- Your password must contain at least 8 characters.
- Your password can't be a commonly used password.
- Your password can't be entirely numeric.

Password confirmation

Enter the same password as before, for verification.

Create

TECHGIG

Your username is **maddynit**.

Documents upload section

Upload Request for Quotation

Choose file

No file chosen

Upload Tender documents

Choose file

No file chosen

Upload Customer clarifications

Choose file

No file chosen

Why your solution should be considered for the final round

Low cost solution

My solution use open source libraries and frameworks except the required only server to deployed the application where clients can submit their request.

Easily Replicable

This solution has ready to use functions which you be used with any other applications

Challenges faced

Any technological challenge that you faced in building the application and how you solved them

- Implementation of Document parsing
As people can upload any format of documents which is not possible to parse with any parser. For this I use fix document format so that document parser can easily parse and provide me the keyword which can be searched easily.

Possible Improvement

01 Any format of document parsing

02 PDF docs can also be supported

THANK YOU

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