



Elastic Stack Overview

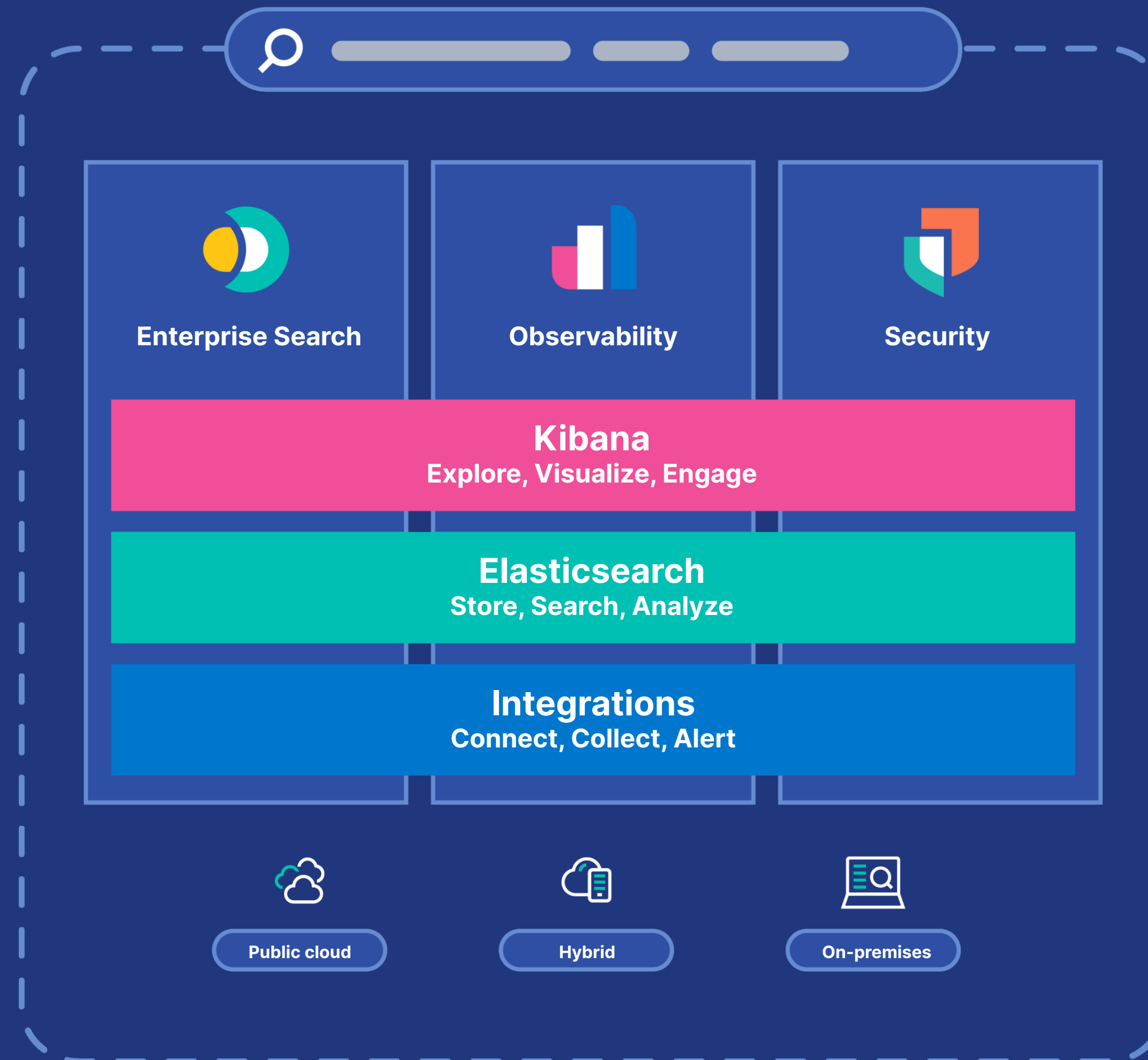
Search. Observe. Protect.



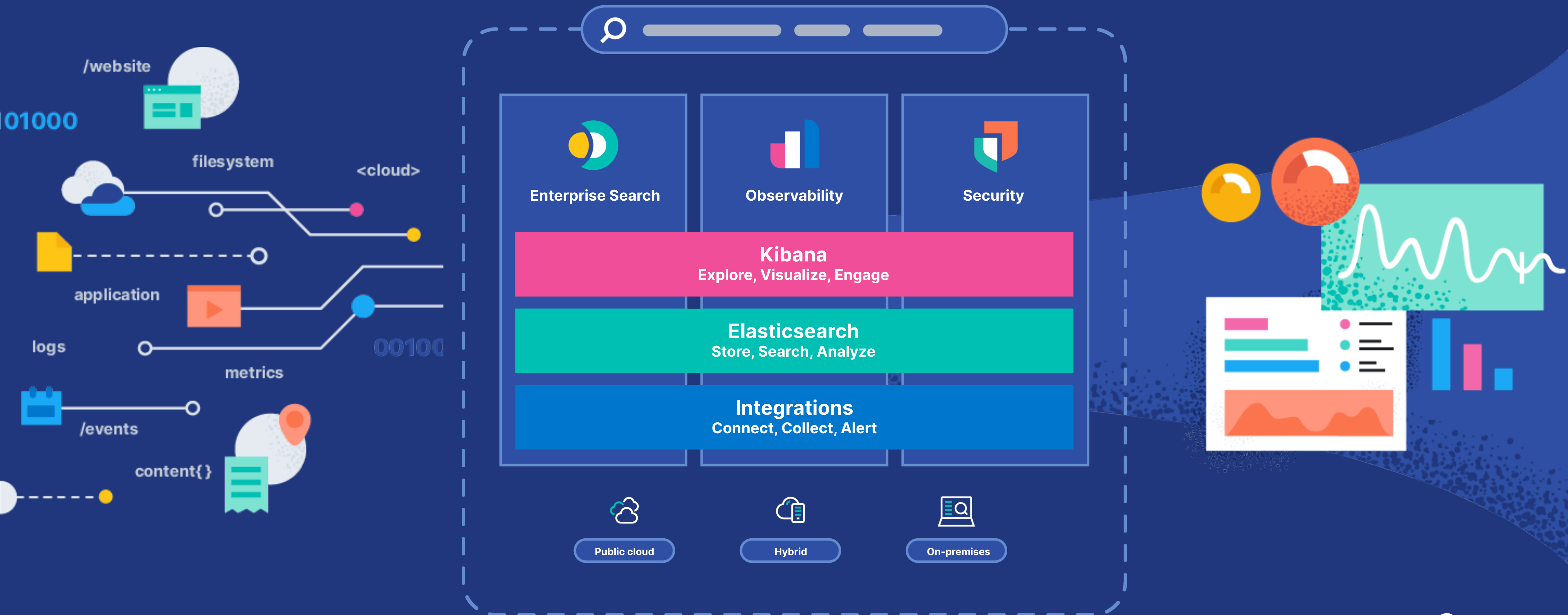
Who?

```
$ curl http://localhost:9200/speaker/_doc/dpilato
{
  "name" : "David Pilato",
  "jobs" : [
    { "name" : "SRA Europe (SSII)", "date" : "1995" },
    { "name" : "SFR", "date" : "1997" },
    { "name" : "e-Brands / Vivendi", "date" : "2000" },
    { "name" : "DGDDI (douane)", "date" : "2005" },
    { "name" : "elastic", "date" : "2013" }
  ],
  "motivations" : [ "family", "job", "deejay" ],
  "blog" : "http://david.pilato.fr/",
  "twitter" : [ "@dadoonet", "@elasticfr" ],
  "email" : "david@pilato.fr"
}
```

The Elastic Search Platform



The Elastic Search Platform



A typical search implementation...

```
CREATE TABLE user
(
  name VARCHAR(100),
  comments VARCHAR(1000)
);
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at french customs service');
INSERT INTO user VALUES ('David Gageot', 'Engineer at Doctolib');
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

David



Search on term

```
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');  
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at  
french customs service');  
INSERT INTO user VALUES ('David Gageot', 'Engineer at Doctolib');  
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

```
SELECT * FROM user WHERE name="David";
```

Empty set (0,00 sec)



Search like

```
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at french customs service');
INSERT INTO user VALUES ('David Gageot', 'Engineer at Doctolib');
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

```
SELECT * FROM user WHERE name LIKE "%David%";
```

name	comments
David Pilato	Developer at elastic
David Gageot	Engineer at Doctolib
David David	Who is that guy?

David



Search for terms

```
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at french customs service');
INSERT INTO user VALUES ('David Gageot', 'Engineer at Doctolib');
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

```
SELECT * FROM user WHERE name LIKE "%David Pilato%";
```

name	comments
David Pilato	Developer at elastic

David Pilato



Search with inverted terms

```
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');  
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at french customs service');  
INSERT INTO user VALUES ('David Gageot', 'Engineer at Doctolib');  
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

```
SELECT * FROM user WHERE name LIKE "%Pilato David%";
```

Empty set (0,00 sec)

```
SELECT * FROM user WHERE name LIKE "%Pilato%David%";
```

Empty set (0,00 sec)



Search for terms

```
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at french customs service');
INSERT INTO user VALUES ('David Gageot', 'Engineer at Doctolib');
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

```
SELECT * FROM user WHERE name LIKE "%David%" AND
                                name LIKE "%Pilato%";
```

name	comments
David Pilato	Developer at elastic

Pilato David



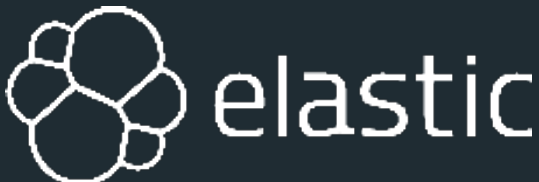
Search in two fields

```
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at french customs service');
INSERT INTO user VALUES ('David Gageot', 'Engineer at Doctolib');
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

```
SELECT * FROM user WHERE name LIKE "%David%" OR
                                comments LIKE "%David%";
```

name	comments
David Pilato	Developer at elastic
Malloum Laya	Worked with David at french customs service
David Gageot	Engineer at Doctolib
David David	Who is that guy?

David





Search with typos

```
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');  
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at  
french customs service');  
INSERT INTO user VALUES ('David Gageot', 'Engineer at Doctolib');  
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

```
SELECT * FROM user WHERE name LIKE "%Dadid%";  
Empty set (0,00 sec)
```



Search with typos

```
INSERT INTO user VALUES ('David Pilato', 'Developer at elastic');
INSERT INTO user VALUES ('Malloum Laya', 'Worked with David at french customs service');
INSERT INTO user VALUES ('David Gageot', 'Engineer at Doctolib');
INSERT INTO user VALUES ('David David', 'Who is that guy?');
```

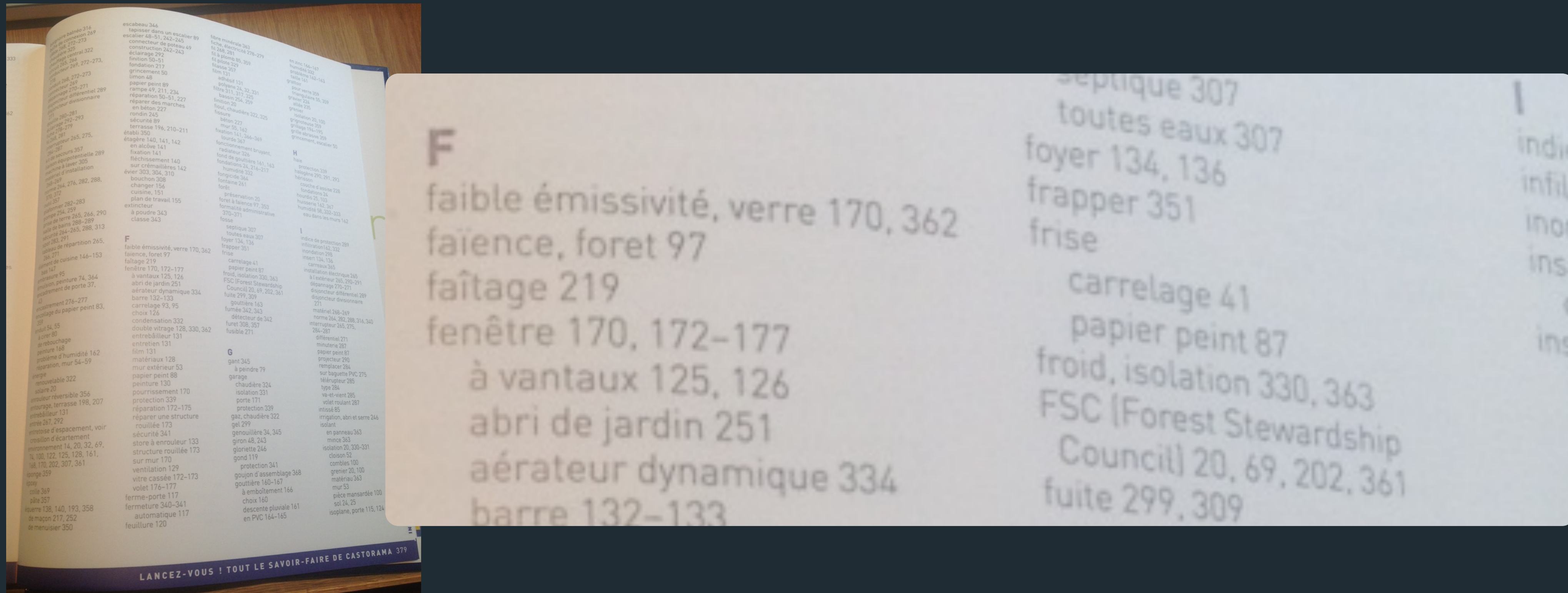
```
SELECT * FROM user WHERE name LIKE "%_adid%" OR
                           name LIKE "%D_did%" OR
                           name LIKE "%Da_id%" OR
                           name LIKE "%Dad_d%" OR
                           name LIKE "%Dadi_%";
```

name	comments
David Pilato	Developer at elastic
David Gageot	Engineer at Doctolib
David David	Who is that guy?



What is a search engine?

Index engine (indexing documents)



Search engine (within the created indices)

Demo time!



4GIFs.com