

Attorney Form Builder



Server Details and Costs

MEMORY	VCPUS	SSD DISK	TRANSFER	PRICE
1 GB	1 vCPU	25 GB	1 TB	\$5/mo \$0.007/hr
2 GB	1 vCPU	50 GB	2 TB	\$10/mo \$0.015/hr
POPULAR 4 GB	2 vCPUs	80 GB	4 TB	\$20/mo \$0.030/hr
8 GB	4 vCPUs	160 GB	5 TB	\$40/mo \$0.060/hr
16 GB	6 vCPUs	320 GB	6 TB	\$80/mo \$0.119/hr

MEMORY	VCPUS	SSD DISK	TRANSFER	PRICE
1 GB	3 vCPUs	60 GB	3 TB	\$15/mo \$0.022/hr
POPULAR 2 GB	2 vCPUs	60 GB	3 TB	\$15/mo \$0.022/hr
3 GB	1 vCPUs	60 GB	3 TB	\$15/mo \$0.022/hr

CPU ?



Memory ?



Disk I/O ?



Disk usage ?



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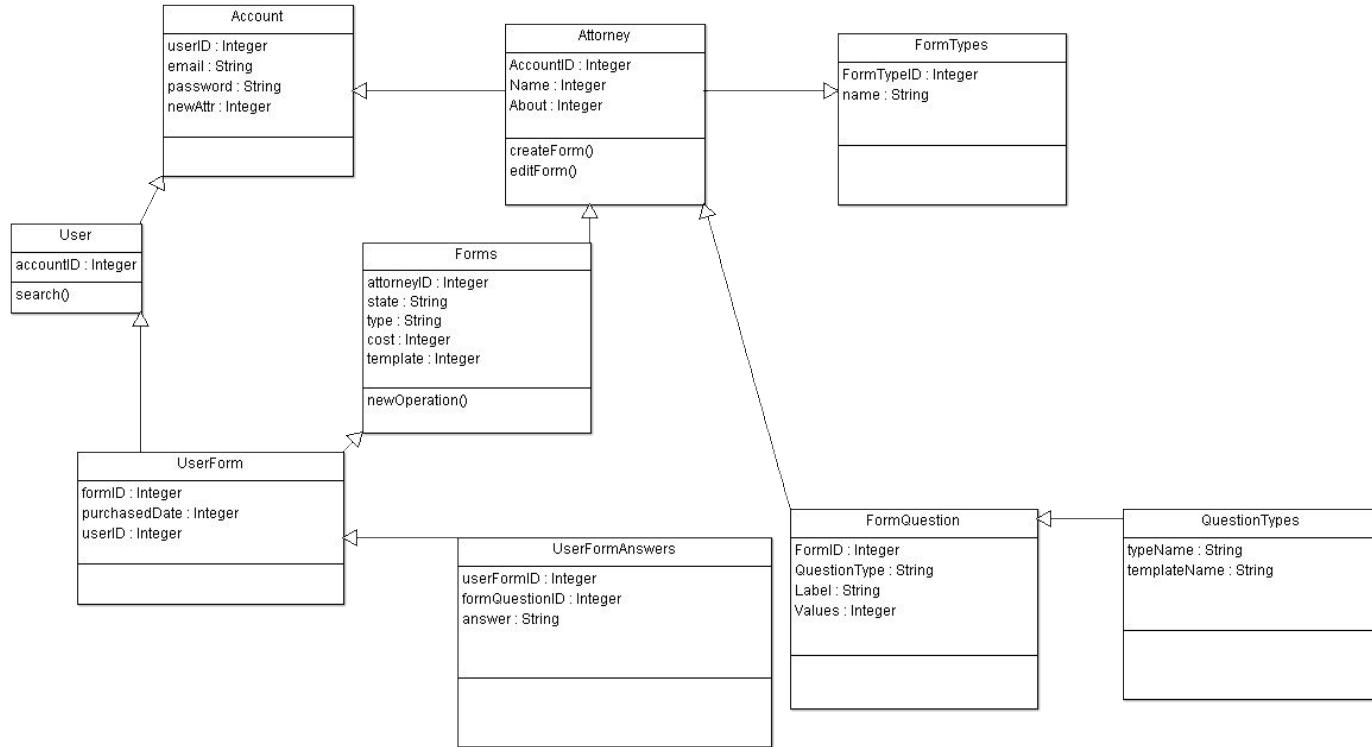
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Software requirements

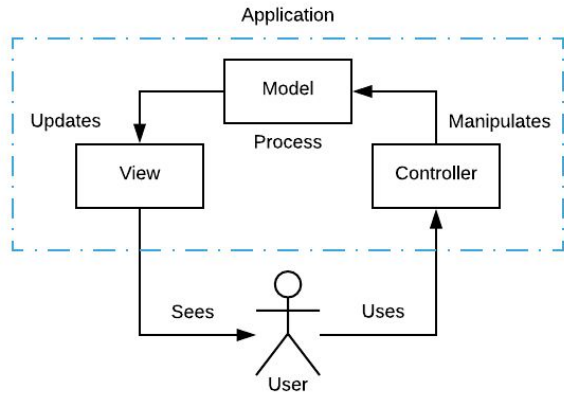
- Apache web server
- MariaDB
- Express web server for Node.js



UML Model



Model-View-Controller Pattern



Application and GUI are designed and built with the user in mind.

- User uses the controller to manipulate the model
- Model updates the view
- User sees the updated view
- Pattern repeats as needed

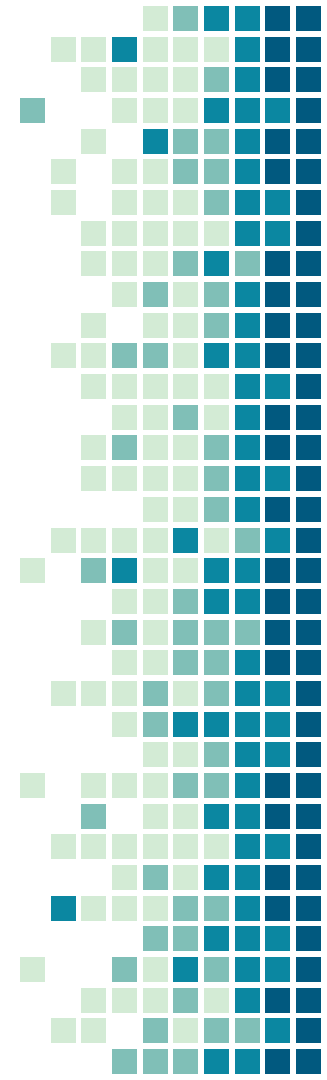
Code Extensibility

NodeJS backend

- expressJS, NPM

React frontend

- Component system, becoming industry standard



QA Methods

Code Testing

- End-to-End & Unit

User Testing

- Non-technical user

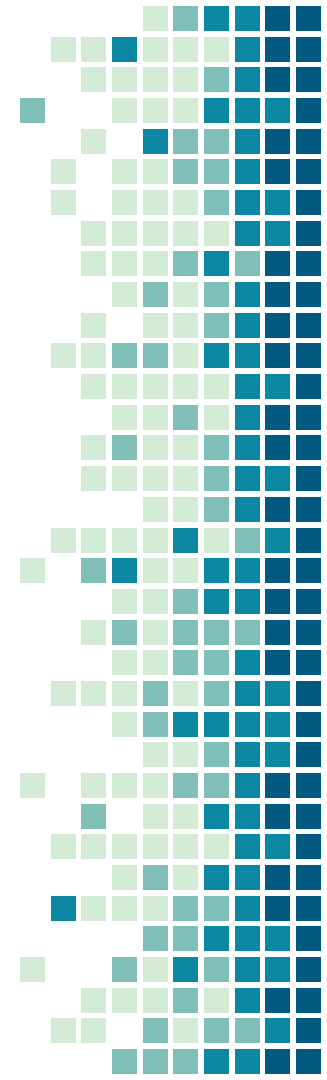
Code Writing Best Practices

- Descriptive naming for classes, methods and variables

- Code is easy to read for future maintainability

Version Control

- Github



Mocha Testing Framework

End to End Tests

- Create Account
- Login
- Form Search
- Build Form

Unit Tests

- User Login
- Purchase Form

```
yarn run v1.5.1
$ nyc mocha --recursive

build forms test
  ✓ should add a question (4694ms)
  ✓ should add a container (3832ms)

search forms test
  ✓ should find forms (3431ms)

login test
  ✓ should login (1540ms)
  ✓ shouldn't login (1280ms)

register test
  ✓ should register (1655ms)
  ✓ shouldn't register - not equal passwords (1289ms)
  ✓ shouldn't register - used email (1243ms)

Purchase form test
  ✓ should purchase (2888ms)
  ✓ should not purchase (1386ms)

user test
  ✓ should login user (1543ms)
  ✓ shouldn not login user (1286ms)

12 passing (29s)
```

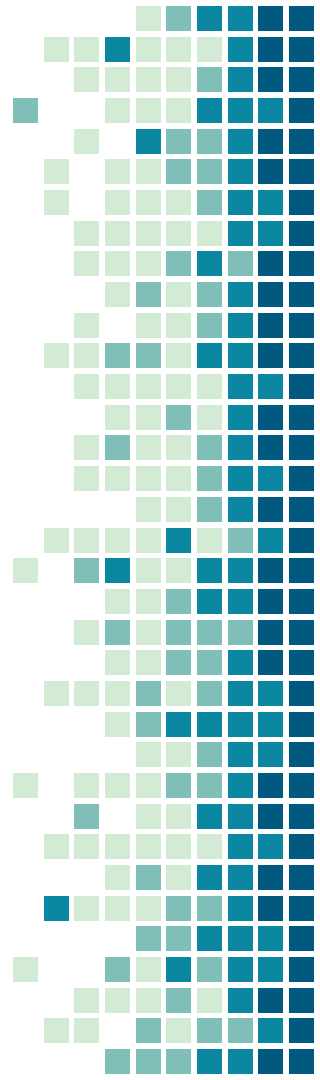
Continuous Integration & Delivery

Github - github.com/ESOF423/attorney-form-builder

- Code changes are committed & pushed to repository
- Generates continuous deployment key

Travis CI - travis-ci.org

- Monitors Github using the deployment key
- Deploys updates automatically



Product Demonstration

<http://server.redstone.lab:8080>

