

Packages used:

1. NodeJS API application built in MVC architecture using MySQL and Express JS (Bezkoder, 2022).
2. MySQL DB hosted in Azure. NodeJS API communicates with MySQL DB using "mysql2" library, "mysql2" (Turner, Sidorov and Dhiman, 2021).
3. Express JS used to create routes/endpoints in NodeJS API, "express" (Express, 2017).
4. Solidity used to write code in Solidity Programming Language which is understood by Ethereum block chain networks, "solc" (Solidity, 2021).
5. Web3 package used to unit test and deploy code to local Ganache and Rinkeby Ethereum networks, "web3" (Web3, 2022).
6. Mocha JS used to write unit test cases for the developed Solidity contracts, "mocha" (Mocha, 2022).
7. Ganache used to create local Ethereum network and unit test Solidity contracts, "ganache" (Truffle Suite, 2022).
8. SendGrid SaaS API used to send Emails to contributors for voting and refund events, "@sendgrid/mail" (Twilio, 2022).
9. Truffle HD wallet provider used to communicate with local Ganache and Rinkeby networks using Ethereum wallet mnemonics, "@truffle/hdwallet-provider" (Truffle, 2022).
10. Azure Web Apps Deploy using YAML file to deploy NodeJS API to Microsoft Azure, "webapps-deploy" (Microsoft Azure, 2021).
11. GitHub Actions to deploy NodeJS API code to Microsoft Azure, "actions" (Microsoft Azure, 2022).

References:

bezkodeer, 2022. *Build Node.js Rest APIs with Express & MySQL* [online]. . Available at: <https://www.bezkoder.com/node-js-rest-api-express-mysql/> [Accessed Aug 21, 2022].

Express, 2017. *Routing* [online]. . Available at: <https://expressjs.com/en/guide/routing.html> [Accessed Aug 21, 2022].

Microsoft Azure, 2022. *Actions* [online]. . Available at: <https://github.com/Azure/actions> [Accessed Aug 21, 2022].

Microsoft Azure, 2021. *Azure Web Apps Deploy* [online]. . Available at: <https://github.com/Azure/webapps-deploy> [Accessed Aug 21, 2022].

Mocha, 2022. *Getting Started* [online]. . Available at: <https://mochajs.org/#getting-started> [Accessed Aug 21, 2022].

Solidity, 2021. *Solidity* [online]. . Available at: <https://docs.soliditylang.org/en/v0.8.16/> [Accessed Aug 21, 2022].

Truffle, 2022. *Truffle HD Wallet Provider* [online]. . Available at: <https://github.com/trufflesuite/truffle-hdwallet-provider> [Accessed Aug 21, 2022].

Truffle Suite, 2022. *Overview* [online]. . Available at: <https://trufflesuite.com/docs/ganache/> [Accessed Aug 21, 2022].

Turner, R., Sidorov, A. and Dhiman, S., 2021. *Node MySQL 2* [online]. . Available at: <https://www.npmjs.com/package/mysql2> [Accessed Aug 21, 2022].

Twilio, 2022. *Sending Email with Microsoft Azure* [online]. . Available at: <https://docs.sendgrid.com/for-developers/partners/microsoft-azure-2021> [Accessed Aug 21, 2022].

Web3, 2022. *web3.eth* [online]. . Available at: <https://web3js.readthedocs.io/en/v1.2.11/web3-eth.html> [Accessed Aug 21, 2022].