

NodeJS Backend Challenge

Context:

You have been given the task to create a new service with a REST API, using Node.js and an in-memory database.

The new service is going to handle home loan application data. One of the developers in the team has already set up the basic skeleton of the service, you are now taking over the task.

Requirement:

The microservice needs to fulfill the following requirements:

- Service is correctly and clearly documented for frontend engineers.
- Necessary validations are in place, returning useful validation errors based on the required data fields (See data dictionary below)
- Appropriate testing coverage is applied to the implementation
- Implement each of the following endpoints for the API

HTTP Method	Path	Description
POST	/applications/	Creates a new application, returning the application and its new identifier.
PUT	/applications/:id	Updates an existing application using the application identifier.
GET	/applications/:id	Retrieves an existing home loan application using the application identifier
DELETE	/application/:id	Soft deletes an existing application using the application identifier
GET	/applications/	Returns all applications that have not been deleted.

Note:

Please note that it is **not important** to finish this challenge. This challenge is meant to show how you approach the problem and how you work. We will take some time toward the end of the hour to talk through your solution and talk about possible next steps that you might have taken.

Appendix:

Home loan application data dictionary

Property	Type	Description
applicant_first_name	string	The first name of the home loan applicant.
applicant_last_name	string	The last name of the home loan applicant.
loan_amount	number	The value of the home loan, represented as whole dollars (AUD).
lender_id	string	The identifier for the lender. Supported values: <ul style="list-style-type: none">- CMB- STG- NCP- NAB
id	string	An alpha numeric identifier for the home loan application submission.
assets	array	List of assets owned by the applicant. (see asset data dictionary below)
liabilities	array	List of liabilities the applicant is responsible for. (see liability data dictionary below)

Asset data dictionary

Property	Type	Description
name	string	The name of the asset e.g House
value	number	The whole dollar value of the asset (AUD)

Liability data dictionary

Property	Type	Description
name	string	The name of the liability e.g Credit Card
value	number	The whole dollar value of the liability (AUD)