



QA CHALLENGE

Thank you for applying for a QA role at MYOB! This challenge is an opportunity for you to demonstrate your testing abilities and technical knowledge.

To complete this challenge you will be required to evaluate a product based on your experience using the application. You can access the application at this URL:

[QA Challenge Web Interface](#)

Some questions in this challenge will also require you to analyse and contribute to the source code of this application. When you have completed the case study, please don't forget to send through a zipped copy of your modified source code along with your other answers. You can download the source code at this URL:

[QA Challenge Source Code](#)

Remember that this is an opportunity for you to showcase your skills. Please try to complete all of the questions to the best of your abilities, and good luck!

BACKGROUND INFORMATION

MYOB has acquired a new HR Payroll System product that we intend to improve on and offer to our customers. Your team has been given responsibility for assessing and maintaining this application.

The application allows users to generate payslips for employees for the current month. It stores the payslip information internally and allow previous payslips to be accessed for audit purposes. It should also prevent users from paying an employee who already received payment for the month.

These are the calculations we expect to be used by the application:

- $\text{pay period} = \text{the current calendar month}$
- $\text{gross income} = \text{annual salary} / 12$
- $\text{net income} = \text{gross income} - \text{income tax}$
- $\text{super} = \text{gross income} \times \text{super rate}$
- $\text{pay} = \text{net income} - \text{super}$
- $\text{Income tax} = (\text{calculated based on gross income})$

0 – \$18,200	Nil
\$18,201 – \$37,000	19c for each \$1 over \$18,200
\$37,001 – \$80,000	\$3,572 plus 32.5c for each \$1 over \$37,000
\$80,001 – \$180,000	\$17,547 plus 37c for each \$1 over \$80,000
\$180,001 and over	\$54,547 plus 45c for each \$1 over \$180,000



QUESTIONS

Q1. Your engineering team would like to know more about the user experience and the state of the new application. Please explore the application through the user-interface (the web link provided above) and report any issues that you find.

Weight: 10 points

Q2. You have received access to the source code for this application, but no one in your team is familiar with the architecture of the system. Please create a high level architectural diagram to demonstrate your understanding of the different components of this application.

Weight: 5 points

Q3. While reviewing the source code you identify two existing test automation frameworks. These do not have a lot of coverage and you decide to try to improve it. Add an additional two executable tests to each of the following test automation frameworks. Do your best to demonstrate your automation skill level and knowledge.

- UI Framework - /payroll/app/test
- API Framework - /payments/app/test

Weight: 10 points

Q4. You have been asked to provide recommendations to the team on how the current test automation frameworks could be improved in order to make them run faster, more reliably or to improve maintainability. Please share three or more recommendations on what you would change and why.

Weight: 5 points

Q5. You have been asked to review the current test automation frameworks and make recommendations on what additional frameworks could be added to improve this application. Please outline three or more additional frameworks you would recommend adding and justify your suggestions.

Weight: 5 points

Q6. Outline what scenarios you would expect each of the test automation frameworks to cover in the future. Please include the existing frameworks as well as any new frameworks you recommended in your previous answer.

Weight: 15 points

Q7. Highlight how and when you expect these automated tests to be executed within an agile cycle.

Weight: 5 points

Bonus Question. You have been asked to consider the future roadmap of this application. What are some recommendations that you would make to improve this application and why?

Weight: 5 points
