

Request for Proposal: Software Development Services

Prepared by Touchstone Institute

December 1, 2022

Request for Proposal

The goal of this RFP is to source a team of developers to work with our inhouse IT team to build the Nurse Ready mobile App, Web app for item management and the backend services

RFP Reference Number: *NurseReady 2022*

Release Date: *12-05-2022*

Closing Date: *12-12-2022 11:59pm*

1. INTRODUCTION

Touchstone Institute is a non-profit corporation that offers expertise in evaluation and curriculum development to promote public confidence in professional competence in the Canadian workforce. We excel in providing competency-based services in support of successful transitions to training and practice that meet professional and societal needs. We are supported by expertise in simulation, innovation in exam technology, and robust research-based quality assurance to meet the diverse needs of our clients, stakeholders, and partners. We specialize in creating valid and authentic competency-based experiences for internationally educated health professionals.

2. BACKGROUND

Preparing for licensure exams, interviews, and a nursing workplace in a new environment is challenging. At Touchstone Institute, we know that this can be particularly difficult in a new country with local language and cultural customs that might be slightly different than that of a nurse's country of training. With funding from the Government of Canada, we're developing an online and mobile-friendly app for internationally educated nurses (IENs). This app will provide insights into the intercultural language and communication strategies that are critical for nursing in Canada. The app is envisioned as a self-directed, assessment-based learning experience that provides an opportunity for IENs to practice skills and receive immediate feedback. It will introduce key intercultural language and communication competencies through a self-assessment model.

3. DELIVERABLES

The deliverables are:

DATE	DELIVERABLES
30 March, 2023	Nurse Ready Mobile app
30 March, 2023	Item Management Web app
30 March, 2023	Backend services/API

4. NATURE AND SCOPE OF WORK

A link to the clickable prototype is [here](#) to provide a general overview of the mobile app and its features and workflow. The wireframes and style guide are also available [here](#).

Working under the direction of Touchstone Institute IT department, the development team will be provided with tasks based on the overall product vision and roadmap.

The selected vendor will provide to Touchstone Institute software development services according to the requirements provided by Touchstone Institute IT. Scope of the Work, applicable rates and/or compensation and other terms of Service delivery will be set forth in the form of a Statement of Work and Rates ("SOW").

Touchstone Institute will provide all frontend design assets in adobe XD format for use by the mobile frontend developer. The scope of work is outlined below in specific detail (Please see [wireframe/style guide](#) for context):

Mobile Application Frontend

1. Loading screen with Nurse ready Animated logo
2. Swipe-able Welcome Page and log in page
3. Swipe-able User Registration form (5 screens)
4. Registration complete screen
5. Reset Password (by email, by sms and verification code) screens
6. Dashboard/home screen
7. Progress (6 screens)
8. Hamburger menu screen
9. About the App screen
10. Account Settings screen
11. My Profile screen
12. Swipe-able Scenario screen (5 screens). Ability to listen to recorded words and sentences.
13. Preassessment screens (3 screens). Ability to record audio responses, re-record and save if necessary.
14. Post assessment screens (4 screens). Ability to record audio responses, re-record and save if necessary. Also, there should be the ability to listen to audio recorded under the preassessment screens side by side with audio recorded in the post assessment screens. Ability to type in self-assessment feedback.
15. Correct Answer screen
16. Incorrect Answer screen
17. Question type screens (5 screens). Each question type will be able to display dynamic content. Each question type will have at least 20 questions dynamically displayed.
 - a. Read Drag and drop (sort)
 - b. Read Drag and Drop (fill in the gap)
 - c. Read and Select
 - d. Listen and Select (ability to listen to recorded phrases or sentences)
 - e. Read and Respond

Web application (Management portal)

1. Main administration page
2. Item management page (5 question types). Ability to add question items according to the 5 question types.
 - a. Read Drag and drop (sort)
 - b. Read Drag and Drop (fill in the gap)
 - c. Read and Select

- d. Listen and Select (ability to upload recorded phrases or sentences)
 - e. Read and Respond
3. Generate report on performance. Track how many attempts it takes a user to get a question correct.

5. PROPOSAL RESPONSE GUIDELINES

5.1 Proposed Project Timeline

Project start date: 01-01-2023

Project end date: 03-31-2023

5.2 Project Resources

Consultants are required to provide qualified mobile frontend, backend/fullstack developers and quality assurance engineers to be embedded in the Touchstone Institute IT development team.

Touchstone Institute will provide all AWS and development infrastructure required to deliver the project.

Mobile (Front end) Developer (1-2)

Job Description

- Support the entire application lifecycle
- Contribute in designing, testing, releasing and application support
- Write a clean and sustainable code that can be used in the future
- Gather specific requirements and suggest solutions
- Write unit and UI tests to identify malfunctions
- Troubleshoot and debug to optimize performance
- Design interfaces to improve user experience based on provided wireframes and prototypes
- Implement new mobile products, applications and protocols

Requirements / Qualifications

- Previous working experience as a Mobile developer for 5 - 7 year(s)
- Experience with educational or language training mobile apps
- Rich portfolio of released applications on the App store or the Android market
- Must be comfortable working with AWS Developer tools, especially Amazon CodeGuru, CodeCommit, CodeBuild, CodeDeploy, CodePipeline, Amazon Lex, Amazon Polly, Amazon Transcribe
- In-depth knowledge of programming languages such as React Native, Flutter, Swift and Java
- 5 years of experience with APIs
- Familiarity with OOP design principles
- Problem solver with excellent analytical skills

Back-End Web Developer (1-2)

Job Description

- Responsible for maintaining and develop all parts of a complex service-oriented system
- Work with a large arsenal of open source and cutting-edge technologies such as Node.js, Angular.js, MongoDB, react, react native, flutter, MySQL, Docker, RabbitMQ and Redis.
- Plan and implement model data structures for scalability
- Write secure code
- Participate in all phases of the development life cycle
- Work on the maintenance and improvement of existing data structures
- Research, evaluate and analyze technical and design requirements
- Incorporate standards-based development processes for website and web/mobile applications.
- Assist with website strategy and planning.
- Subject matter expert, providing: guidelines, best practices and training to other individuals
- Formulate concepts and ideas for additional products, tools and services

Requirements / Qualifications

- 5 -10+ years of experience in Back End Web development
- Must be comfortable working with AWS Developer tools, especially Amazon CodeGuru, CodeCommit, CodeBuild, CodeDeploy, CodePipeline, Amazon Lex, Amazon Polly, Amazon Transcribe
- Experience with react native, Nodejs, Angularjs and flutter
- Really good understanding of the Linux ecosystem and experience with AWS cloud environment
- 5 years of experience with APIs
- Experience with automation tools like AWS Cloudfront
- Experience with Docker and how to use it in the context of Node.js and micro-services
- Experience with high availability solutions (load balancing, HAProxy...)
- Experience with service discovery tools like Consul, Etcid or regular DNS (SRV records)
- Knowledge of either CoffeeScript or LiveScript
- Testing experience with Mocha, Karma, etc

Quality Assurance (QA) Engineer (1)

Job description

- Test current products and identifying deficiencies
- Suggest solutions to identified product problems
- Investigate product quality in order to make improvements to achieve better customer satisfaction
- Plan, create and manage the overall Quality Planning strategy
- Collaborate with the Product Development team to ensure consistent project execution
- Identify quality assurance process bottleneck and suggest actions for improvement
- Oversee continuous improvement projects

- Collect quality data
- Identify key KPIs for product quality
- Prepare and present reports and metrics to Management

Requirements / qualifications

- 5 years of experience as a Quality Assurance Engineer
- 5 years of experience with a variety of different testing techniques such as UI Testing, Automated Testing, Test Driven Development Strategies and other
- 5 years of experience with coding using JAVA, Nodejs, Swift, React Native
- 5 years of experience with web security technology
- 5 years of experience with software QA tools and processes
- Comfortable working with Amazon Web Services Developer tools

5.3 Costs and Charges

Consultants are to clearly lay out the costs associated with proving the resources listed in section 5.2 based on the requirements in section 4 and the prototype and wireframe.

6. SUBMISSION

As a potential supplier of all or some of these professional services, you are invited to submit a proposal in accordance with the terms and conditions detailed in this document.

Forward electronic copies of the proposal to to: **t.ologun@tsin.ca**. Please include NurseReady2022 in the subject line.

Touchstone Institute
 Temidayo Ologun
 145 Wellington St. West, Suite 600
 Toronto, Ontario M5J 1H8

By 12-12-2022, 11:59pm

If you have any questions about the submission, please contact Temidayo Ologun at t.ologun@tsin.ca. Please include NurseReady2022 in the subject line.

7. REVIEW SCHEDULE

Please review the following schedule of important dates:

Action Item	Date Due
RFP Release Date	12-05-2022
Last Day for Written Questions	12-09-2022
Closing Date	12-12-2022
Tentative Review and Selection of Consultant	12-16-2022

8. INQUIRIES

Inquiries, interpretations, and questions regarding this RFP are to be directed to Temidayo Ologun in writing, at t.ologun@tsin.ca. Please do not contact other members of Touchstone Institute.

Written e-mail questions may be received up to *12-09-2022*. Verbal questions may be asked at any time during regular business hours, but verbal responses are not binding on either party.

10. RFP PROCESS

Upon closing, Touchstone Institute will review all proposals for completeness. Only complete proposals will be given further consideration. Eligible proposals will be evaluated based on the response guidelines in Section 5 and financial competitiveness.

11. PERIOD OF AGREEMENT

The term of any contractual agreement will be from the date of award up to *03-31-2023*.

12. SELECTION OF SUCCESSFUL CONSULTANT

The selection committee will consist of the Touchstone Institute's Director of Design and Innovation, and Manager of Technology.

Consultants may be required to participate in an interview prior to awarding the contract. Touchstone Institute reserves the right to reject any or all proposals and to accept the proposal deemed most favourable to the interests of Touchstone Institute.

13. CONTRACT NEGOTIATION

Touchstone Institute will negotiate a contractual agreement with the preferred consultant. If Touchstone Institute is unable to negotiate an acceptable contractual agreement with the preferred consultant, then the second preferred consultant may be selected and a contractual agreement developed.

Touchstone Institute, at any time and without liability, may withdraw from negotiations with any potential consultant.

14. TERMS AND CONDITIONS

14.1 Touchstone Institute will not be responsible for any costs incurred by a consultant in preparing and submitting proposals and/or attending interviews. Touchstone Institute accepts no liability of any kind to a consultant prior to the signing of a contract.

14.2 Submission of a proposal shall not obligate, nor should it be construed as obligating Touchstone Institute to accept any such proposal or to proceed further with the project. Touchstone Institute may, in their sole discretion, elect not to proceed with the project, and may elect not to accept any or all proposals for any reason.

14.3 At all times, the Consultant has the responsibility to notify Touchstone Institute, in writing, of any ambiguity, divergence, error, omission, oversight or contradiction contained within the proposal as it is discovered.

14.4 Consultants may amend or withdraw their proposals prior to the closing date and time specified in the RFP by way of written notice to the inquiry line at s.cecchetto@tsin.ca. After the closing date and time, proposals may not be withdrawn.

14.5 Proposals submitted shall be final and may not be altered by subsequent offerings, discussions, or commitments unless the consultant is requested to do so by Touchstone Institute.

14.6 The consultant must identify any information in its proposal that it considers to be confidential or proprietary.

14.7 All proposals and accompanying documentation received under this competition will become the property of Touchstone Institute and will not be returned.

14.8 Touchstone Institute has reserved the right to waive minor non-compliance by a consultant with the requirements of the RFP. This will allow Touchstone Institute to consider and possibly accept any proposal which is advantageous even though the proposal may be non-compliant in some minor respect.

14.9 Touchstone Institute reserves the right to accept or reject, in whole or in part, any or all proposals.

14.10 Touchstone Institute reserves the right to cancel and/or re-issue this RFP at any time for any reason without penalty.

14.11 Prices quoted are to be held firm for a minimum of 120 days following the RFP closing date, and shall remain in effect through the duration of the agreement.

14.12 The consultant's proposal shall form part of the contractual agreement by attachment and will be incorporated by reference. Claims made in the proposal shall constitute contractual warranties. Any provision in the proposal may be included in the contractual agreement as direct provision thereof.