

**Project No. and Name:** P42 – Early stage startup building multisided platform for research management - multi party approval flows

**Project Development Period:** 12 weeks

**Client Name:** Grace Ning Guan

**Client Organisation:** OIC Education

**Tutor Name:** Vittoria Salim

<b>Background:</b> <i>The context for this project</i>	The team behind this project has a passion for helping out the younger generation. Their nature of being involved parents decided to tackle a problem that continues to worsen in the post-pandemic world. That problem is the ever increasing gap of skill and education access amongst high school students.
<b>Aim</b> <i>Purpose of the project.</i>	To develop a portal that increases the efficiency of career planning for students and increases the accessibility of career planning to all students.
<b>Objectives (SMART):</b> <i>Goals of the project.</i>	Successfully implement all the required features for ONE portal (to be confirmed by client). This required features are listed under the Scope section of this document.
<b>Success Criteria:</b> <i>What does success look like for the sponsor and how can it be measured.</i>	<b>What does success look like for the client?</b> The client would like us to implement as many of the required features for our allocated portal. However, the client, also, noted that if any particular proves to be too technically difficult to achieve, it is still fine and likely to be considered a success provided most other more basic features have been implemented.  <b>How can we measure success?</b> We can measure how successful we are by considering how many features of our allocated portal we have successfully implemented to achieve the desired functionality on the platform. This can be broken down further through user stories and work tasks.
<b>Deliverables</b> <i>List the outputs that will be produced as part of the project including the final product or service.</i>	Please see the required features for each portal under the Scope section below.

<p><b>Scope</b>  <i>The work that needs to be accomplished in order to deliver/complete the project.</i></p>	<p><b>We are only expected to work on ONE of the portals listed below. The portal has NOT yet been confirmed by the client.</b></p> <p><b>Student portal</b></p> <ul style="list-style-type: none"> <li>- Display and submit survey forms</li> <li>- Display survey result analysis</li> <li>- Display internal site news and notifications</li> <li>- Interesting hub for student engagement</li> <li>- Track daily mood status (simple emoji)</li> <li>- “Need Help” button that notifies school staff</li> <li>- Display path information and institution rankings</li> </ul> <p><b>Parent Portal</b></p> <ul style="list-style-type: none"> <li>- View and complete survey forms</li> <li>- Analyse survey results</li> <li>- Monitor recent behaviours and interests</li> <li>- View target career paths and associated institution fees</li> </ul> <p><b>School Portal</b></p> <ul style="list-style-type: none"> <li>- Analyse surveys for various students</li> <li>- View interests and career trends</li> <li>- Modify mood statuses and identify students needing emotional support</li> <li>- Generate and share interesting article</li> </ul> <p><b>Admin Portal</b></p> <ul style="list-style-type: none"> <li>- Create and manage surveys</li> <li>- Set display options for different user roles</li> <li>- Generate news and notifications</li> <li>- Manage a calendar</li> <li>- Create and link user accounts</li> <li>- Generate daily mood visuals</li> <li>- Control feature access for different users</li> <li>- Search and review individual user statuses</li> </ul>
<p><b>Out Scope</b>  <i>Work you are not required to deliver as part of your project</i></p>	<ul style="list-style-type: none"> <li>- Designing survey</li> <li>- Collecting survey and student data</li> <li>- Designing career match algorithm</li> <li>- Designing guidelines to address privacy concerns</li> </ul>

<b>Milestones and Timelines</b> <i>Key checkpoints with the client e.g. client deployment, approval deadlines</i>	<p><b>Week 1</b></p> <ul style="list-style-type: none"> <li>- Initialise Bitbucket repository</li> <li>- Start designing entity relations</li> <li>- Set up project management tool Jira</li> </ul> <p><b>Week 2</b></p> <ul style="list-style-type: none"> <li>- Create React app</li> <li>- Set up Node.js and Express.js server</li> <li>- Configure MongoDB database</li> <li>- Implement basic API endpoints</li> <li>- Set up user authentication system</li> </ul> <p><b>Week 3-4</b></p> <ul style="list-style-type: none"> <li>- Implement basic React components and routing</li> <li>- Create login/registration pages</li> <li>- Develop dashboard layout</li> <li>- Implement state management</li> </ul> <p><b>Week 5</b></p> <ul style="list-style-type: none"> <li>- Create survey form components</li> <li>- Implement survey submission functionality</li> <li>- Develop API endpoints for survey data</li> </ul> <p><b>Week 6</b></p> <ul style="list-style-type: none"> <li>- Implement survey results retrieval and display</li> <li>- Create data visualisation components for survey analysis</li> </ul> <p><b>Week 7</b></p> <ul style="list-style-type: none"> <li>- Develop news feed component</li> <li>- Implement notification system</li> <li>- Create API endpoints for news and notifications</li> </ul> <p><b>Week 8</b></p> <ul style="list-style-type: none"> <li>- Implement "interesting hub" feature</li> <li>- Develop daily mood tracking functionality</li> <li>- Create "Need Help" button</li> </ul> <p><b>Week 9</b></p> <ul style="list-style-type: none"> <li>- Integrate career paths feature</li> <li>- Implement institution rankings display</li> </ul> <p><b>Week 10</b></p> <ul style="list-style-type: none"> <li>- Conduct thorough testing of all features</li> <li>- Fix bugs and refine user interface</li> <li>- Optimise performance and responsiveness</li> </ul> <p><b>Week 11</b></p> <ul style="list-style-type: none"> <li>- Set up Bitbucket Pipelines for CI/CD</li> <li>- Deploy application to Heroku</li> <li>- Write user documentation and API documentation</li> </ul> <p><b>Week 12</b></p> <ul style="list-style-type: none"> <li>- Conduct final round of testing</li> <li>- Prepare project presentation</li> <li>- Create demo video</li> <li>- Finalise project report</li> </ul>
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<p><b>Meeting Frequency</b>  <i>With what regularity will the team meet with the client and report to the client; and group meetings.</i></p>	<p>Group</p> <ul style="list-style-type: none"> <li>- 2-3 times per week (including once during allocated tutorial time)</li> </ul> <p>Tutor</p> <ul style="list-style-type: none"> <li>- Once a week during allocated tutorial time</li> </ul> <p>Client</p> <ul style="list-style-type: none"> <li>- Once a week (Either in person or using zoom. To be discussed using email)</li> <li>- Follow up as needed</li> </ul>
<p><b>Human Resources:</b>  <i>Are there other specialist staff or subject matter experts that will participate?</i></p>	<p><b>Grace Ning Guan</b>, Founder</p> <ul style="list-style-type: none"> <li>- 20 years of experience in the education industry including billion-dollar education business development and admissions at the University of Sydney</li> </ul> <p><b>Dennis Scott</b>, COO</p> <ul style="list-style-type: none"> <li>- Over 20 years of technical, sales, operational leadership developing and directing teams</li> </ul> <p><b>Saqib</b>, CIO</p> <ul style="list-style-type: none"> <li>- CIO of John Hopkins Aramco Healthcare</li> <li>- 25 years of experience in Digital Innovation/Transformation, Cyber Security, Enterprise Risk, Business Resilience, Data Privacy, Audit &amp; Compliance</li> </ul> <p><b>Lei Wei</b>, CFO</p> <ul style="list-style-type: none"> <li>- CFO of NHS (National Health Service) UK</li> <li>- Honorary Treasurer in the UK charity sector</li> </ul> <p><b>Dr TJ Dimkov</b>, CISO</p> <ul style="list-style-type: none"> <li>- 15 years of cyber security background</li> <li>- has a PhD in cyber security</li> <li>- Global Head of Security at Prosus Global</li> </ul>
<p><b>Other Resources Provided:</b>  <i>Are there other resources to be utilised in the project and provided by the client? Data? Equipment?</i></p>	<p><b>Resources to be provided by the client:</b></p> <ul style="list-style-type: none"> <li>- Career algorithm</li> <li>- Student and survey data</li> <li>- Moqups licence</li> <li>- Brand design</li> </ul>
<p><b>Other Resources Needed:</b>  <i>Are there other resources to be utilised in the project but need to be prepared by the group?</i></p>	<p><b>Frontend</b></p> <ul style="list-style-type: none"> <li>- React</li> <li>- React Router</li> <li>- Redux/Context API</li> </ul> <p><b>Backend</b></p> <ul style="list-style-type: none"> <li>- node.js</li> <li>- express.js</li> </ul> <p><b>Database</b></p> <ul style="list-style-type: none"> <li>- MongoDB or PostgreSQL</li> </ul> <p><b>Version Control</b></p>

	<ul style="list-style-type: none"><li>- Bitbucket</li></ul> <b>API Requests</b> <ul style="list-style-type: none"><li>- Axios/Fetch API</li></ul> <b>UI Components</b> <ul style="list-style-type: none"><li>- Material UI/Anti Design</li></ul> <b>Form Handling</b> <ul style="list-style-type: none"><li>- Formik/React Hook Form</li></ul> <b>Authentication</b> <ul style="list-style-type: none"><li>- JSON Web Tokens</li></ul> <b>Build Tools</b> <ul style="list-style-type: none"><li>- Create React App</li></ul> <b>Hosting</b> <ul style="list-style-type: none"><li>- Heroku</li></ul> <b>CI/CD</b> <ul style="list-style-type: none"><li>- Bitbucket Pipelines</li></ul>
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