

## Comp3059 Capstone Project I

### Part II – Technology Requirements

#### BizChats Development Team

#### Team Introduction:

- Alexis Gorospe: Specializes in front-end development using React.js and manages authentication features like Google Recaptcha.
- Fahad Al-Hadeethi: Focuses on mobile app development with React Native and optimizes PostgreSQL database performance.
- Daniel Fajardo: Designs intuitive UI/UX for web and mobile applications and handles AWS API integration.
- Milan Mislov: Oversees cloud infrastructure and file management using AWS S3 and manages PostgreSQL databases.
- Lara Alkhatabi: Handles AWS S3 file management and implements secure authentication with Google Recaptcha.

#### Approval List:

Name	Project Role	Signature	Date
Alexis Gorospe	Front-end Developer	A.G	11-22-2024
Fahad Al-Hadeethi	Mobile App Developer	F.A	11-22-2024
Daniel Fajardo	Database Administrator	D.F	11-22-2024
Milan Mislov	Cloud Infrastructure Specialist	M.M	11-22-2024
Lara Alkhatabi	UI/UX Designer	L.A	11-22-2024

## A) Technological Requirements

Technology	Description	Pros	Cons
React.js	Framework for building the web application's front-end.	Enables fast and dynamic user interfaces; modular and reusable components; large community support.	Requires experience for efficient implementation; frequent updates may require regular maintenance.
React Native	Framework for creating the mobile app.	Cross-platform development with a single codebase; native-like performance.	Steeper learning curve for complex animations and features; dependency on third-party libraries.
AWS (Cloud Hosting)	Provides scalable cloud hosting for the application backend.	Highly reliable infrastructure, minimal downtime, and extensive integrations with other AWS services.	Potential cost concerns with scaling; dependence on AWS uptime.
AWS S3	Manages file storage and retrieval.	Scalable and secure for storing large files; supports high availability.	Costs can escalate with increased usage.
Google Recaptcha	Adds authentication to prevent bots and enhance security.	Easy to implement; provides strong protection against bots and malicious actors.	Can create slight user inconvenience during authentication.
PostgreSQL	Relational database management system for structured data.	Reliable and feature-rich; supports complex queries and ACID compliance for data integrity.	Requires advanced setup for high availability; less flexible for dynamic schema changes.

**B) Learning Plan:**

Team Member	Responsibility	Existing Skill Level(%)	Learning Plan
Alexis	Front-end Development (React.js)	75%	<ul style="list-style-type: none"> <li>- <b>Start Date:</b> Dec 1, 2024</li> <li>- <b>End Date:</b> Jan 15, 2025</li> <li>- <b>Resources:</b> React.js documentation, Codecademy React course</li> </ul>
	Authentication (Google Recaptcha)	70%	<ul style="list-style-type: none"> <li>- <b>Start Date:</b> Jan 16, 2025</li> <li>- <b>End Date:</b> Feb 5, 2025</li> <li>- <b>Resources:</b> Google Recaptcha Developer Docs</li> </ul>
Fahad	Mobile App Development (React Native)	70%	<ul style="list-style-type: none"> <li>- <b>Start Date:</b> Dec 5, 2024</li> <li>- <b>End Date:</b> Jan 30, 2025</li> <li>- <b>Resources:</b> React Native Documentation, YouTube tutorials</li> </ul>
	Database Optimization (PostgreSQL Performance)	50%	<ul style="list-style-type: none"> <li>- <b>Start Date:</b> Feb 1, 2025</li> <li>- <b>End Date:</b> Feb 20, 2025</li> <li>- <b>Resources:</b> AWS Documentation, Cloud Academy AWS courses</li> </ul>
Daniel	UI/UX Design for Mobile and Web Applications	70%	<ul style="list-style-type: none"> <li>- <b>Start Date:</b> Dec 21, 2024</li> <li>- <b>End Date:</b> Jan 10, 2025</li> </ul>

## Technology Requirements

			<b>- Resources:</b> Figma Tutorials, Nielsen Norman Group's Articles
	API Integration (AWS Cloud Hosting)	40%	<b>- Start Date:</b> Feb 6, 2025 <b>- End Date:</b> Mar 1, 2025 <b>- Resources:</b> AWS API Documentation
Milan	Cloud Hosting & File Management (AWS S3)	70%	<b>- Start Date:</b> Dec 15, 2024 <b>- End Date:</b> Feb 20, 2025 <b>- Resources:</b> AWS Documentation, Cloud Academy AWS courses
	Database Management (PostgreSQL)	60%	<b>- Start Date:</b> Dec 10, 2024 <b>- End Date:</b> Feb 5, 2025 <b>- Resources:</b> PostgreSQL Documentation, Udemy course
Lara	Cloud Hosting & File Management (AWS S3)	50%	<b>- Start Date:</b> Feb 1, 2025 <b>- End Date:</b> Feb 20, 2025 <b>- Resources:</b> AWS Documentation, Cloud Academy AWS courses
	Authentication (Google Recaptcha)	70%	<b>- Start Date:</b> Dec 1, 2024 <b>- End Date:</b> Dec 20, 2024 <b>- Resources:</b> Google Recaptcha Developer Docs