

Young Smart Men ConnectAbility

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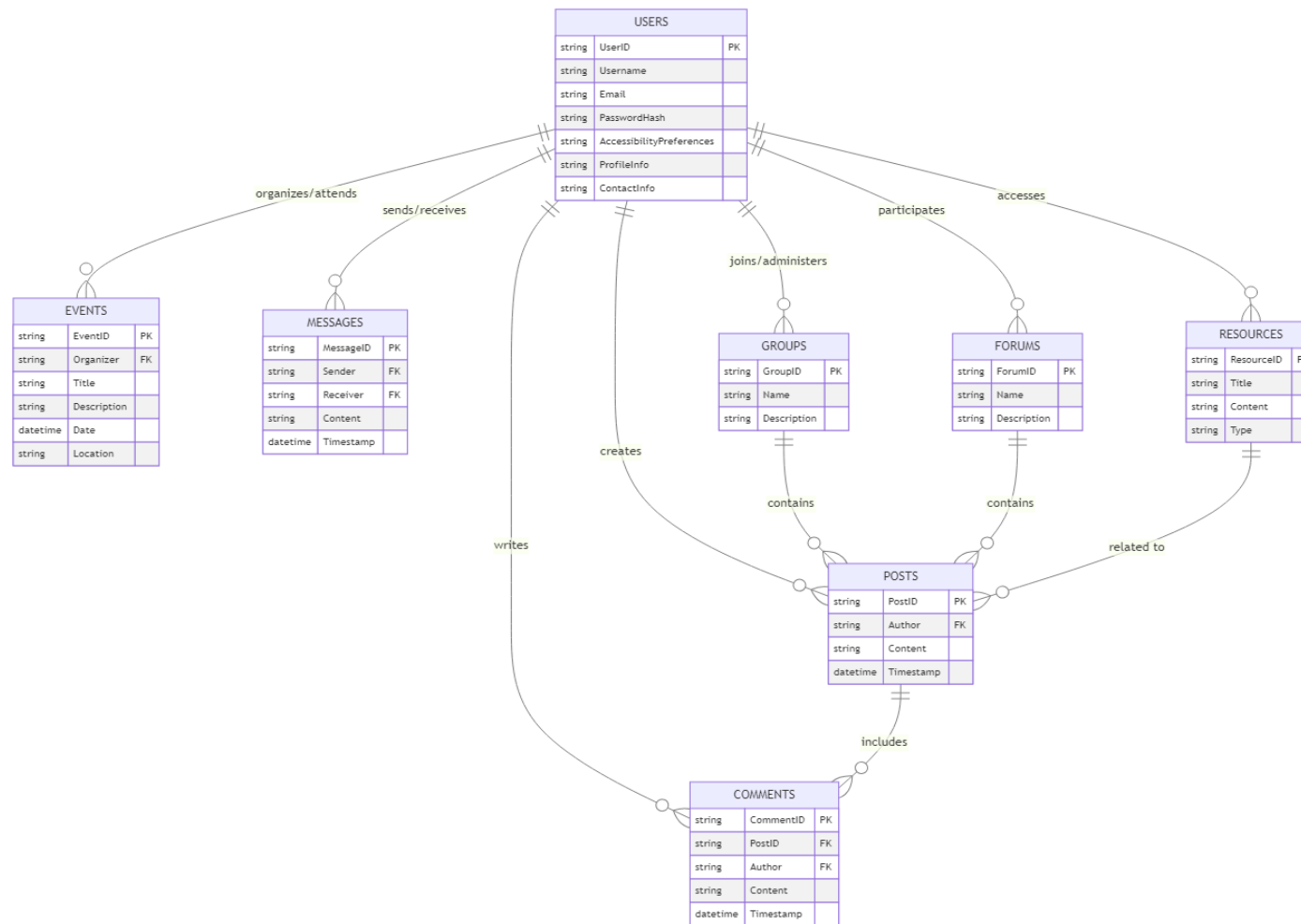


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Collection Relationship Diagram

Data Dictionary

Users Collection

- **UserID** (string, PK): Unique identifier for each user.
- **Username** (string): User's chosen name, unique.
- **Email** (string): User's email address, unique.
- **PasswordHash** (string): Hashed password for security.
- **AccessibilityPreferences** (string): User's accessibility settings (e.g., screen reader, voice commands).
- **ProfileInfo** (string): User's bio, interests, etc.
- **ContactInfo** (string): User's contact details.

Posts Collection

- **PostID** (string, PK): Unique identifier for each post.
- **Author** (string, FK to UserID): ID of the user who created the post.
- **Content** (string): Text and/or images of the post.

- **Timestamp** (datetime): Date and time the post was created.
- **Comments** (array of CommentIDs): IDs of comments on the post.
- **Likes** (array of UserIDs): IDs of users who liked the post.

Comments Collection

- **CommentID** (string, PK): Unique identifier for each comment.
- **PostID** (string, FK to PostID): ID of the post the comment is on.
- **Author** (string, FK to UserID): ID of the user who made the comment.
- **Content** (string): Text of the comment.
- **Timestamp** (datetime): Date and time the comment was made.

Events Collection

- **EventID** (string, PK): Unique identifier for each event.
- **Organizer** (string, FK to UserID): ID of the user organizing the event.
- **Title** (string): Name of the event.
- **Description** (string): Details about the event.
- **Date** (datetime): When the event is scheduled.
- **Location** (string): Where the event is taking place.
- **Attendees** (array of UserIDs): IDs of users attending the event.

Messages Collection

- **MessageID** (string, PK): Unique identifier for each message.
- **Sender** (string, FK to UserID): ID of the user sending the message.
- **Receiver** (string, FK to UserID): ID of the user receiving the message.

- **Content** (string): Text of the message.
- **Timestamp** (datetime): Date and time the message was sent.

Groups Collection

- **GroupID** (string, PK): Unique identifier for each group.
- **Name** (string): Name of the group.
- **Description** (string): Description of the group.
- **Members** (array of UserIDs): IDs of users in the group.
- **Admins** (array of UserIDs): IDs of users who administer the group.
- **GroupPosts** (array of PostIDs): IDs of posts made in the group.

Forums Collection

- **ForumID** (string, PK): Unique identifier for each forum.
- **Name** (string): Name of the forum.
- **Description** (string): Description of the forum.

Resources Collection

- **ResourceID** (string, PK): Unique identifier for each resource.
- **Title** (string): Title of the resource.
- **Content** (string): Content of the resource.
- **Type** (string): Type of resource (e.g., article, video).

Lessons Learned

Michael Mondelice:

This semester, I particularly enjoyed learning to use Figma for creating wireframes in our group project. While topics like RFQ, Scope Creep, and DFDs were informative, designing with Figma was the highlight. It was both fun and creatively fulfilling, allowing me to bring our project ideas to life visually and improve team communication. This hands-on experience with Figma was a standout aspect of my learning.

Christopher Perez:

Reflecting on the work completed throughout the semester and developing the foundation for ConnectAbility, I would say that I have gained quite a bit from working on this with my teammates. Alongside my teammates I learned a lot about what it takes to make something from just an idea. The delegation and collaboration between the teammates made learning and completing this project possible.

Jamaal Floyd:

Looking back on this entire project process, there are many lessons to take away from it. From the very first challenge of scheduling a time to meet on a consistent basis to our very last presentation during the expo, there was a lesson to learn at every step of the way.

Lessons Learned

Teamwork: Throughout the entire project teamwork was essential to everything. ConnectAbility was not an app where we all could just work on separate pieces then come together. No, we had to collaborate on every milestone and make sure we were always on the same page at every step of the way.

Project Leader: Being a leader is not for everyone. A true leader makes sure everyone is heard, everyone was content with the direction of the app, and all in all that everyone was happy and having fun. I learned many lessons as it pertains to leadership over the course of this project whether it was from gaining hands on experience being the group leader or watching other members of my group lead and taking notes and observing them.

Design Development: I learned some skills on what it takes when you plan your product. Like making use-cases, dfd's, gantt charts, and WBS. All of which are extremely helpful in the planning and design process of developing something.

Big Picture: I didn't necessarily have a title for this lesson learned, hence why I just said, "big picture", but I learned you truly have to look at everything you could possibly think of when creating an app. For example, you must make sure all rules and regulations are being followed also depending on the topic you must ensure your following those guidelines as well like us with disability and accessibility guidelines and what not.

Jaiden Howard -

Reflecting on the journey of developing ConnectAbility, I've gained invaluable insights into project management, teamwork, and the nuances of IT project development.

Milestone 1:

- **Teamwork and Leadership:** Scheduling and conducting the initial meeting was a lesson in leadership and coordination. It taught me the importance of clear communication and setting a collaborative tone from the outset.
- **Time Management:** Developing the project charter, SWOT analysis, budget, scope, and team contract underlined the significance of realistic time estimation and prioritization.
- **Lesson Learned:** Early-stage planning is crucial. In future projects, I would allocate more time for this phase to accommodate thorough requirement analysis and team alignment.

Milestone 2:

- **Customer Interaction:** The necessity of constant user engagement became evident. This interaction shaped our understanding of user needs, influencing our design and development decisions.
- **Analytical Skills:** Creating the WBS, Gantt Chart, and Network Diagram honed my project management skills. It taught me to break down complex tasks into manageable parts and visualize project timelines effectively.
- **Lesson Learned:** I learned the value of flexibility in planning. Going forward, I would incorporate more iterative feedback loops with stakeholders to refine requirements continuously.

Milestone 3:

- **Design Skills:** Developing DFDs and interactive wireframes using tools like Figma and draw.io improved my technical design skills. It emphasized the importance of user-centric design in creating accessible interfaces.
- **Marketing Insight:** Creating marketing materials like flyers and brochures was a creative challenge. It taught me to think from a user's perspective, highlighting features and benefits that resonate with the target audience.
- **Lesson Learned:** The design phase is more than aesthetics; it's about functionality and user experience. Future projects would benefit from even earlier and more frequent user testing sessions.

Milestone 4:

- **Technical Proficiency:** Designing the database for a NoSQL environment was a significant learning curve. It required understanding the nuances of MongoDB and how it differs from traditional SQL databases.
- **Risk Assessment:** Developing a risk register was an exercise in foresight. It made me aware of potential pitfalls and the importance of contingency planning.
- **Lesson Learned:** In-depth technical training and risk assessment should be integral from the project's inception. Future projects would benefit from a more robust initial training phase and a comprehensive risk analysis.

ConnectAbility was more than a project; it was a journey in understanding the profound impact of technology on society. It taught me the importance of empathy, inclusivity, and strategic planning in IT project development. These lessons will be the guiding principles in my future endeavors in the tech world.

Stage 1: Initiating

Risk Rank	Risk	Description	Category	Root Cause	Triggers	Potential Response	Risk Owner	Probability	Impact	Status	Risk Response Strategy
4	D1	Project funding delays	T	Lack of funding clarity	Project approval delays	Establish clear funding milestones	Project Manager	Moderate	High	N/A	Close monitoring of funding progress
2	FF4	Difficulty in hiring skilled developers	Xmen	Limited talent pool	Competitive job market	Engage recruitment agencies	HR Manager	High	High	N/A	Active recruitment and talent retention strategies
1	I1	Lack of project clarity	T	Undefined project goals	Unclear project scope	Develop a detailed project charter	Project Manager	Low	Moderate	N/A	Stakeholder collaboration for clear project definition

Risk Rank	Risk	Description	Category	Root Cause	Triggers	Potential Response	Risk Owner	Probability	Impact	Status	Risk Response Strategy
3	FF3	Internal team conflicts	FF4	Personality clashes	Miscommunication	Implement team-building activities	Project Manager	Moderate	Moderate	N/A	Proactive conflict resolution strategies
5	I2	Unforeseen user adoption issues	Xmen	Lack of market research	Misaligned app features	Conduct thorough user surveys	Marketing Lead	High	Moderate	N/A	Continuous user feedback and adaptation

Stage 2: Planning

Risk Rank	Risk	Description	Category	Root Cause	Triggers	Potential Response	Risk Owner	Probability	Impact	Status	Risk Response Strategy
3	Tech2	Compatibility issues with assistive technologies	Tech	Lack of accessibility testing	Inadequate user feedback	Engage accessibility experts	UX/UI Lead	Low	High	N/A	Continuous accessibility testing and improvements

Risk Rank	Risk	Description	Category	Root Cause	Triggers	Potential Response	Risk Owner	Probability	Impact	Status	Risk Response Strategy
1	D2	Project timeline delays	T	Inadequate planning	Scope changes	Develop a comprehensive project plan	Project Manager	Moderate	High	N/A	Regular project timeline reviews
2	Xmen1	External stakeholder disagreements	Xmen	Conflicting interests	Lack of communication	Facilitate regular stakeholder meetings	Project Manager	Low	Moderate	N/A	Proactive communication and conflict resolution
4	I3	Insufficient team skills	FF4	Skill gaps	Inadequate training	Conduct skills assessments	HR Manager	Moderate	High	N/A	Develop a training and skill improvement plan
5	I4	Insufficient budget allocation	T	Inadequate financial planning	Scope changes	Conduct a detailed budget analysis	Finance Manager	Moderate	High	N/A	Regular budget reviews and adjustments

Stage 3: Analysis, Pre-production & Planning

Risk Rank	Risk	Description	Category	Root Cause	Triggers	Potential Response	Risk Owner	Probability	Impact	Status	Risk Response Strategy
5	I1	Lack of user engagement	FF4	Insufficient user involvement	Limited user feedback	Implement user engagement strategies	UX/UI Lead	Moderate	Moderate	N/A	Regular user engagement activities
2	FF2	External stakeholder resistance	Xmen	Resistance to change	Lack of communication	Develop a comprehensive communication plan	Project Manager	Low	Moderate	N/A	Proactive stakeholder communication
3	FF1	Internal team resistance	FF4	Resistance to change	Lack of communication	Implement a change management plan	Project Manager	Low	Moderate	N/A	Proactive change communication and training
4	Xmen2	Regulatory compliance issues	Xmen	Lack of awareness	Changes in regulations	Regularly monitor regulatory updates	Legal Advisor	Low	High	N/A	Legal team for rapid compliance updates
1	Tech1	Inadequate technology assessment	Tech	Rapidly evolving technology	Unforeseen tech changes	Continuous technology trend analysis	Tech Lead	Moderate	High	N/A	Regular technology assessments

Risk Rank	Risk	Description	Category	Root Cause	Triggers	Potential Response	Risk Owner	Probability	Impact	Status	Risk Response Strategy
3	Tech2	Compatibility issues with assistive technologies	Tech	Lack of accessibility testing	Inadequate user feedback	Engage accessibility experts	UX/UI Lead	Low	High	N/A	Continuous accessibility testing and improvements
1	FF2	Design misalignment with user needs	FF4	Insufficient user research	Changing user requirements	Conduct user feedback sessions	UX/UI Lead	Moderate	Moderate	N/A	Regular user feedback sessions
4	Xmen1	Stakeholder disagreements on design	Xmen	Conflicting interests	Lack of communication	Facilitate regular stakeholder meetings	UX/UI Lead	Low	Moderate	N/A	Proactive communication and design alignment
2	FF1	Internal team miscommunication	FF4	Lack of communication	Misunderstandings	Implement effective communication channels	UX/UI Lead	Moderate	Moderate	N/A	Regular team communication channels
5	Tech3	Unforeseen technology dependencies	Tech	Rapidly evolving technology	Integration challenges	Continuous monitoring and updates	Integration Lead	Moderate	High	N/A	Quick adaptation plan for emerging tech

Stage 5: Development

Risk Rank	Risk	Description	Category	Root Cause	Triggers	Potential Response	Risk Owner	Probability	Impact	Status	Risk Response Strategy
6	F1	Technical failure during development	Tech	Inadequate testing protocols	Complex coding requirements	Implement rigorous testing procedures	Tech Lead	Moderate	High	N/A	Regular testing and quality assurance
3	FF2	Feature creep during development	FF4	Lack of scope control	Changing user requirements	Implement strict change control	Project Manager	Moderate	High	N/A	Continuous scope reviews and approvals
1	D1	Delay in development milestones	T	Inadequate planning	Unexpected technical challenges	Develop a detailed development plan	Tech Lead	Moderate	High	N/A	Regular development timeline reviews
5	Tech4	Unreliable third-party APIs	Tech	Third-party service issues	Changes in third-party APIs	Continuous monitoring and updates	Integration Lead	Moderate	High	N/A	Backup APIs identified and tested
4	D2	Inadequate resource allocation	FF4	Insufficient team resources	Increasing workload	Regular resource assessments	Project Manager	Moderate	High	N/A	Quick adaptation plan for resource allocation

Risk Rank	Risk	Description	Category	Root Cause	Triggers	Potential Response	Risk Owner	Probability	Impact	Status	Risk Response Strategy
7	D3	Delay in app launch	T	Unforeseen technical issues	Inadequate contingency planning	Implement agile development practices	Project Manager	Low	Moderate	N/A	Flexible project timeline and continuous monitoring
3	FF3	Inadequate user training materials	Xmen	Lack of training material expertise	User feedback on training difficulties	Collaborate with training experts	Training Lead	Moderate	Moderate	N/A	Continuous improvement of training materials
6	Tech5	Cybersecurity threats	Tech	Lack of security measures	Increased cyber threats	Robust cybersecurity measures	Security Officer	Moderate	High	N/A	Continuous monitoring and updates
4	FF2	Insufficient communication during implementation	Xmen	Lack of communication channels	Misunderstandings	Regular team communication channels	Communications Lead	Low	Moderate	N/A	Proactive communication channels
2	D4	Inadequate disaster recovery plan	T	Lack of disaster recovery preparation	Unforeseen disasters	Regular disaster recovery drills	IT Operations	Low	High	N/A	Backup systems identified and tested

Risk Rank	Risk	Description	Category	Root Cause	Triggers	Potential Response	Risk Owner	Probability	Impact	Status	Risk Response Strategy
4	F2	App performance issues post-launch	Tech	Insufficient load testing	Sudden increase in user traffic	Regularly monitor app performance	Tech Lead	Moderate	High	N/A	Immediate performance optimization
1	I5	Inadequate post-launch support	FF4	Lack of post-launch planning	Increased user support requests	Implement a robust post-launch support plan	Customer Support	Moderate	Moderate	N/A	Continuous support optimization
3	Xmen3	Negative user feedback	Xmen	Unmet user expectations	App usability issues	Proactive user feedback channels	UX/UI Lead	Low	Moderate	N/A	Rapid response to user concerns
2	FF2	Inadequate communication during evaluation	Xmen	Lack of communication channels	Misunderstandings	Regular team communication channels	Communications Lead	Low	Moderate	N/A	Proactive communication channels
5	Tech6	Inadequate data backup	Tech	Lack of backup planning	Data loss incidents	Regular data backup and recovery drills	IT Operations	Low	High	N/A	Offsite data backup and recovery plan

Risk Rank	Risk	Description	Category	Root Cause	Triggers	Potential Response	Risk Owner	Probability	Impact	Status	Risk Response Strategy
3	Xmen2	Negative media coverage	Xmen	Controversial app features	Miscommunication	Establish clear communication channels	Communications Lead	Low	Moderate	N/A	Proactive public relations and crisis management
5	FF4	Lack of external stakeholder engagement	Xmen	Insufficient outreach efforts	Limited external involvement	Implement external engagement strategies	Marketing Lead	Moderate	Moderate	N/A	Continuous external engagement activities
2	FF1	Internal team misalignment on PR strategy	FF4	Lack of communication	Misunderstandings	Develop a comprehensive PR strategy	Communications Lead	Low	Moderate	N/A	Regular team communication channels
4	FF3	Unforeseen PR challenges	Xmen	Changes in public sentiment	Negative user experiences	Develop a crisis management plan	Communications Lead	Low	High	N/A	Rapid response to PR challenges
1	Xmen4	Regulatory issues in PR campaigns	Xmen	Lack of awareness	Changes in regulations	Regularly monitor regulatory updates	Legal Advisor	Low	High	N/A	Legal team for rapid compliance updates

Stage 9: Close-out of Project

Risk Rank	Risk	Description	Category	Root Cause	Triggers	Potential Response	Risk Owner	Probability	Impact	Status	Risk Response Strategy
5	I4	Insufficient budget allocation	T	Inadequate financial planning	Scope changes	Conduct a detailed budget analysis	Finance Manager	Moderate	High	N/A	Regular budget reviews and adjustments
1	D1	Delay in project close-out	T	Unforeseen technical issues	Inadequate contingency planning	Implement agile development practices	Project Manager	Low	Moderate	N/A	Flexible project timeline and continuous monitoring
4	FF4	Unresolved stakeholder concerns	Xmen	Persistent stakeholder issues	Lack of stakeholder engagement	Establish a stakeholder feedback loop	Project Manager	Moderate	Moderate	N/A	Proactive stakeholder engagement
2	D2	Incomplete project documentation	T	Lack of documentation processes	Mismanagement of project records	Develop a comprehensive documentation process	Documentation Lead	Moderate	High	N/A	Regular documentation reviews and updates
3	FF3	Unmet user expectations	Xmen	Inadequate user feedback channels	Negative user feedback	Proactive user feedback channels	UX/UI Lead	Low	Moderate	N/A	Continuous user feedback and adaptation

Risk Rank

- 1 Disaster
- 2 Dibacle
- 3 Issue
- 4 To be observed
- 5 Minor success
- 6 Success
- 7 Excelsior!

Risk Abbreviations Key

D	Delay
De	Decrease
E	Early
F	Failure
I	Increase

Categories Key

FF4	Human Resources Internal
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Xmen	Human Resources External
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Tech	Technology
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T	Time
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