QUAiL

User

Guide

About This Guide

This document is the user guide for the QUAiL web application. It is intended for end-users, such as students, educators, and researchers, who want to learn how to use the platform for their qualitative data analysis projects.

This guide focuses on the practical, "how-to" aspects of every feature. It is organized to follow a typical research workflow, starting from setting up your account and projects, moving through the core tasks of importing and coding your data, and finishing with advanced visualization, statistical analysis, and exporting your work. This guide focuses entirely on using QUAiL through its web interface. You don't need any programming or technical background to follow these instructions.

Note to Users: QUAiL is continuously being improved based on user feedback. If you encounter any issues with the application and/or this document or have suggestions for new features, please use the bug report/feedback options available in your user profile menu.

Table of Contents

1. Getting Started

1.1. What is QUAiL?

QUAiL is a web-based application designed to help you analyze qualitative data such as interview transcripts, survey responses, documents, and audio recordings. You can organize your materials, create codes (tags) to categorize important themes, write analytical memos, and generate statistical reports.

1.2. Creating Your Account

1. **Sign Up**: Click the "Sign Up" button on the homepage.
2. **Fill in Your Details**: Enter your name, email address, and create a password.
3. **Email Verification**: Check your mailbox for the verification email and click “Verify Email Address”.
4. **Log In**: Use your email and password to access the application.

1.3. Forgot Your Password?

1. Click "Forgot Password" on the login page.
2. Enter your email address.
3. Check your email for a reset link.
4. Click the link and enter your new password.

2. Creating and Managing Projects

2.1. What is a Project?

A project in QUAiL is a workspace that contains all your related files, codes, memos, and analysis for a particular research study or analysis task.

2.2. Creating a New Project

1. **Access Your Dashboard**: After logging in, you'll see your projects dashboard.
2. **Click "Create Project"**: Look for the button in the top-right.
3. **Name Your Project**: Enter a name for your project.
4. **Add Description** (Optional): Provide additional context about your project.
5. **Create**: Click "Create Project" to save.

2.3. Managing Existing Projects

2.3.1. Viewing Your Projects

- Your projects dashboard shows all your projects in a grid or list view
- Use the search bar to find specific projects by name
- Sort projects by name, creation date, or last modified date

2.3.2. Editing Project Details

1. Click on "Edit" icon.
2. Update the name.
3. Click "Update Project".

2.3.3. Copying a Project

1. Click on "Copy" icon.
2. By default, the annotations will also be copied. If you don’t want to include annotations (codes, memos, highlights) uncheck the box.
3. Click "Copy".

2.3.4. Deleting a Project

1. Click on "Delete" icon.
2. Type the project name exactly inside the provided prompt to confirm deletion.
3. Click "Delete Project" - **This action cannot be undone.**

2.3.5. Downloading a Project

1. Click on "Download" icon.
2. The project will be downloaded as a .quail file.

2.3.6. Importing a Project (.quail file)

1. Click on "Import Project" button.
2. Select a .quail file to import.

3. Working with Files

3.1. Supported File Types

QUAiL supports two types of files:

- **Text files**
- **Audio files**

3.2. Importing Text Documents

1. **Open Your Project**: Click on a project from your dashboard.
2. **Click "Import"**: Look for the import button in the left panel beside "Imported Files" section heading.
3. **Select "Import Text"**: Choose this option from the import dialog.
4. **Choose Processing Option**:
    - **Split by turns**: Click on Turn-wise Splitting.
    - **Split by sentences**: Click on sentence-wise Splitting.
5. **Select Your File**: Browse and choose your document.
6. **Review Content**: The system will open the imported file in edit mode.

3.3. Importing Audio Files

1. **Open Your Project**: Click on a project from your dashboard
2. **Click "Import"**: Look for the import button in the left panel beside "Imported Files" section heading.
3. **Select "Import Audio"**: Choose this option from the import dialog.
4. **Choose Processing Option**:
    - **Split by turns**: Click on Turn-wise Splitting.
    - **Split by sentences**: Click on sentence-wise Splitting.

5. **Upload Your Audio**: Select your audio file (note: larger files may take longer to process)
6. **Wait for Transcription**: The system will automatically transcribe your audio file.
7. **Review Transcript**: Once complete, you can review and edit the generated transcript in edit mode.

4. Editing Documents

4.1. Edit Mode Usage

The application will automatically open the file in edit mode after the import is complete. Inside edit mode you may update your document to:

- Clean up formatting issues.
- Correct transcription errors in audio files.
- Add or remove content.
- Improve readability.

Once your changes are complete, click the "Save" button in the top-right. In the confirmation window that appears, check the box to acknowledge that this action is permanent, and then click "Save and Lock" to finalize your document. **This action cannot be undone.**

4.2. Audio Transcript Editing

Audio transcripts have special editing features because the application automatically formats them with a consistent structure of speaker names and timestamps. This predictability allows for specialized features that aren't possible with standard text documents, which can have varied and unpredictable formatting.

4.2.1. Editing Dialogue

1. **Edit Speaker Text**: Click directly on any dialogue text to edit it.
2. **Save Changes**: Text saves automatically when you click outside the text box.

4.2.2. Renaming Speakers

When renaming a speaker, you can choose to update all instances or just one.

1. Click on the speaker name you want to rename.
2. Modify the name to your desired name.
3. Click on the green tick to confirm rename.
4. A dialog box will appear.
   - To rename all instances:
     - Directly click on the "Rename" button to rename all instances.
     - Use this to change a default speaker label (e.g., "Speaker A") to a custom name (e.g., "John Doe") throughout the entire transcript.
   - To rename that particular instance:
     - Uncheck the "Rename all instances" checkbox to apply change to only that instance.

   - Rename one: Use this for the rare case where the transcription service made a mistake and assigned the wrong speaker to a single line of dialogue.

4.2.3. Audio Playback Controls

While editing transcripts, you can:

- **Play/Pause**: Control audio playback.
- **Adjust Speed**: Change playback speed for easier transcription review.
- **Loop**: Enable audio looping.
- **Navigate by Time**: Ctrl+Click (or Cmd+Click on Mac) on any text to jump to that point in the audio

5. Managing Files

5.1.1. Viewing Files

- All your project files appear in the left panel under "Imported Files" section.
- Click any file name to view its content in the document viewer.
- Use the search bar in the left panel to find specific files.

5.1.2. Renaming Files

1. In the Imported Files list, click the More Options (⋯) icon next to the file you wish to rename.
2. Click on "Rename".
3. Enter the desired name.
4. Press the green tick to confirm rename.

5.1.3. Deleting Files

1. In the Imported Files list, click the More Options (⋯) icon next to the file you wish to delete.
2. Click on "Delete".
3. Type the file name exactly inside the provided prompt to confirm deletion.
4. Click "Delete" - **This action cannot be undone.**

5.1.4. Pinning files

1. In the Imported Files list, click the More Options (⋯) icon next to the file you wish to pin to the top.
2. Click on "Pin". (Only maximum of 3 files can be pinned)

5.1.5. Exporting files

1. In the Imported Files list, click the More Options (⋯) icon next to the file you wish to export.
2. Hovering "Export" will open a dropdown.
   - Click on "PDF" if you wish to export the file as a PDF file with ".pdf" extension.
   - Click on "Word (.docx)" if you wish to export the file as a Word file with ".docx" extension.

6. Coding Your Data

6.1. What are Codes?

Codes are labels or tags that you assign to segments of your text to identify themes, concepts, or patterns. For example, you might create codes like "frustration", "motivation", or "technical issues" when analyzing interview data.

6.2. Creating Codes

6.2.1. Method 1: Create Codes Beforehand

Use this method to set up your codebook before you begin analyzing a document.

1. In the left panel, find the "Code Definitions" section.
2. Click the Add New Code (+) button.
3. In the modal that appears, enter a Name for your code (e.g., "Positive Experience").
4. (Optional) Add a Description to provide more detail about the code's meaning.
5. Choose a Color to visually identify the code.
6. Click "Save Code" to add it to your project's codebook.

6.2.2. Method 2: Create Codes While Analyzing

Use this method to create new codes as you identify themes during your analysis.

1. Select a piece of text in the document viewer.
2. Click the Code icon in the floating toolbar.
3. When the Assign Code pop-up appears, click the "Define New" option at the bottom.
4. Fill in the details for your new code and click "Save Code".

Important Note: This method only creates the code in your codebook. It does not apply it to the text you initially selected. You must select the text again and choose your newly created code from the list to apply it.

7. Managing Codes

7.1. Editing Existing Codes

1. In the left panel, find your code in the "Code Definitions" section.
2. Click the edit icon (pencil) next to the code name.
3. Update the name, description, or color as needed.
4. Click "Update Code" to confirm changes.

7.2. Viewing Code Details

1. Hover over any code in the document viewer to see a tooltip with assigned and overlapped code information.
2. In the left panel under "Code Definitions" section, click on a code name to see all text segments associated with that code.
3. The "Code Definition Details" pop up shows both local (current document) and global (entire project) frequency.

7.3. Merging Codes

If you have similar codes that should be combined:

1. **Open Code Management**: Look for "Merge/Split Codes" option in the left panel beside the "Code Definitions" section heading.
2. **Select "Merge Codes"**: Choose this tab in the dialog.
3. **Select Source Codes**: Choose the codes you want to combine.
4. **Enter Details**: Enter name and color for the new merged code.
5. **Confirm Merge**: Click on "Merge Codes" button to apply new code to all the segments from the source codes.

7.4. Splitting Codes

If a code has become too broad and needs to be divided:

1. **Open Code Management**: Look for "Merge/Split Codes" option in the left panel beside the "Code Definitions" section heading.
2. **Select "Split Code"**: Choose this tab.
3. **Choose Source Code**: Select the code to split.
4. **Define New Codes**: Create multiple new codes and enter details.
5. **Review Segments**: You'll be shown each coded segment and asked to assign it to one of the new codes or assign no code to the segment.

7.5. Deleting Codes

1. Find the code in the left panel.
2. Click the delete icon (trash can).
3. Type "I confirm" in the provided prompt to confirm deletion. This will remove all coding applied with this code - **This action cannot be undone.**

8. Working with Coded Segments

8.1. Viewing All Coded Segments

1. **Open Data Table**: Click "View Data" or "Table View" in the toolbar
2. **Browse by View**:
    - **Overall**: See all coded segments grouped by code
    - **By Document**: See segments organized by document, then by code
    - **Overlaps**: See only segments where multiple codes overlap
3. **Search and Filter**: Use the search bar to find specific segments
4. **Sort**: Click column headers to sort by different criteria

8.2. Editing Coded Segments

1. In the document viewer, click on any coded text (it will be colored and may have a small marker)
2. Use the options that appear to:
    - **Change the code** assigned to this segment
    - **Delete the coding** (removes the code but keeps the text)
    - **View details** about this coded segment

9. Adding Memos and Highlights

9.1. What are Memos?

Memos are analytical notes that you attach to specific pieces of text. They're useful for recording your thoughts, interpretations, or questions about particular segments.

9.1.1. Adding a Memo

1. **Select Text**: Select the text you want to write about.
2. **Choose "Memo"**: Click the "Memo" button in the floating toolbar.
3. **Write Your Memo**:
   - **Title**: Give your memo a descriptive title.
   - **Content**: Write your analytical thoughts or observations.
4. **Save**: Click "Save" to attach the memo to the selected text.

9.1.2. Managing Memos

- **View Memos**: Memos appear as small note icons next to the text.
- **Edit Memos**: Click on a memo icon to read, edit, or delete it.
- **Memo List**: Find all memos in the left panel under "Memos".
- **Search Memos**: Use the search function to find specific memo content.

9.2. What are Highlights?

Highlights are simple colored markers that don't include analytical content. They're useful for marking important passages or organizing your reading.

9.2.1. Creating Highlights

1. **Select Text**: Highlight the text you want to mark.
2. **Choose "Highlight"**: Click the "Highlight" button.
3. **Apply**: The text will be marked with your chosen highlight color.

9.2.2. Managing Highlights

- **Change Color**: The dropdown next to "Highlighter" icon in the document toolbar provides different colors to choose from.
- **Remove Highlights**: Select the eraser icon from the document toolbar in the top-right and double-click or select the text the you want to remove highlight from.

10. Analyzing Your Data

10.1. Data Overview Tables

10.1.1. Accessing Data Tables

1. **Open Project Overview**: Click the list icon or "Project Overview & Stats" in the navigation bar or in the left panel to open.
2. **Choose View Type**:
   - **Table View**: See your coded data in organized tables.
   - **Visualizations**: View charts and graphs.
   - **Statistical Analysis**: Run statistical tests.

10.1.2. Table View Options

- **Overall**: Summary of all coded segments by code.
- **By Document**: Data organized by document, then by code.
- **Overlaps**: Show only text segments coded with multiple codes.

10.1.3. Using Table Features

- **Search**: Filter data using the search bar.
- **Sort**: Click column headers to sort by name, frequency, or other criteria.
- **Export**: Download your data tables as Excel files.

10.2. Visualizations

10.2.1. Available Chart Types

1. **Bar Charts**: Compare frequencies across codes.
2. **Pie Charts**: Show proportions of different codes.
3. **Radar Charts**: Compare multiple codes across several dimensions.
4. **Word Clouds**: Visualize most frequent codes as differently sized words.
5. **Tree Maps**: Display hierarchical data with nested rectangles.

10.2.2. Creating Visualizations

1. **Open Visualizations Tab**: In the Project Overview, click "Visualizations".
2. **Select Chart Type**: Click on any chart icon in the sidebar.
3. **View Results**: Your data will automatically populate the selected chart.
4. **Download**: Click "Download as PNG" to save the chart.

10.3. Statistical Analysis

QUAiL provides Chi-Square statistical tests to help you identify significant relationships in your coded data.

10.3.1. Types of Statistical Tests

Goodness of Fit Test: Tests whether your observed code frequencies match an expected pattern.

- Use when: You want to see if codes are distributed as expected.

Test of Independence: Tests whether two sets of variables are independent.

- Use when: You want to see if codes and documents are related.

Test of Homogeneity: Tests whether different groups have the same distribution.

- Use when: You want to compare code distributions across different document groups.

10.3.2. Running Statistical Tests

1. **Open Statistical Analysis**: Click the "Statistical Analysis" tab in your data view.
2. **Choose Test Type**: Select the appropriate Chi-Square test based on your research question.
3. **Configure Variables**:
   - Select which codes to include in your analysis.
   - Choose which documents or document groups to analyze.
   - Set up expected frequencies (for goodness of fit tests).
4. **Validate Assumptions**: Click "Validate Data" to check if your data meets statistical requirements.
5. **Review Assumptions**: The system will check requirements like minimum expected frequencies.
6. **Run Test**:
   - If validation passes, the "Run Test" button will activate and you can click it to perform the analysis.
   - If validation fails, the application will provide a "Merge Codes" feature and you may merge multiple codes to combine their frequencies and re-validate the data.
   - If validation fails again, and the contingency table is 2x2 and no more codes can be merged further, the application will provide "Fisher’s Exact Test" as a fallback.
7. **Interpret Results**: View your results including:
   - Test statistic, p-value, Degrees of Freedom, Cramer’s V and Sample Size.
   - Statistical significance.

- Visual charts showing your data distribution

10.3.3. Understanding Results

- **P-value**: If less than 0.05, your results are typically considered statistically significant.
- **Effect Size**: Indicates the practical significance of your findings.
- **Charts**: Visual representations help you understand the patterns in your data.
- **Interpretation**: The system provides plain-language explanations of your results.

11. Exporting Your Work

11.1. Exporting Data Tables

1. **Open Table View**: Navigate to Project Overview.
2. **Select Format**:
    - **Overall**: Summary of all coded segments by code.
    - **By Document**: Data organized by document, then by code.
    - **Overlaps**: Show only text segments coded with multiple codes.
3. **Choose Export Option**: Click "Export Table". Your Excel file will download automatically.
4. **Code Matrix**: Click "Export Code Matrix" to export a one-hot coded matrix of the coded data.

11.2. Exporting Visualizations

1. **Create Your Chart**: Generate any visualization in the Visualizations tab.
2. **Download Options**: Click "Download as PNG".
3. **Choose Quality**: Select download quality.
4. **Save**: The image file will be saved to your computer.

11.3. Exporting Statistical Reports

1. **Complete Your Analysis**: Run any statistical test.
2. **Export Results**: Click "Export PDF" in the results panel.
3. **Download Report**: A comprehensive PDF report with all tables, charts, and statistics will be created.

11.4. Exporting Memos

1. **Select a File**: Choose the document containing memos you want to export.
2. **Export Memos**: Click "Export Memos" icon next to the "Memos" heading in the left panel.
3. **Download Excel**: All memos for that document will be compiled in a spreadsheet.

12. User Settings and Preferences

12.1. Accessing Your Profile

1. **Click Your Profile**: Look for the user profile logo in the top-right corner.
2. **Profile Menu**: Access options for preferences, bug report, feedback, and logout.

12.2. Setting Preferences

1. **Open Preferences**: Click "Preferences" from your profile menu.
2. **Customize Settings**:
   - **Show Tooltips**: Toggle whether code information appears when you hover over coded text.
3. **Restore Defaults**: Reset all preferences to original settings if needed.
4. **Save Changes**: Your preferences are automatically saved.

12.3. Providing Feedback

QUAiL welcomes your feedback to improve the application:

1. **Report Bugs**: Use the "Report a Bug" link to report issues that you face.
2. **Give Feedback**: Use the "Give Feedback" link to share suggestions.
3. **Contact Support**: Both options will direct you to google forms where you can describe your experience.

12.4. Logging Out

1. **Profile Menu**: Click the user profile logo in the top-right corner.
2. **Log Out**: Click the "logout" button to securely end your session.
3. **Confirm**: You'll be returned to the login page.

13. Tips for Effective Use

13.1. Best Practices for Coding

1. **Start Small**: Begin with a few broad codes and refine them as patterns emerge.
2. **Be Consistent**: Apply codes consistently across your data.
3. **Use Descriptions**: Write clear descriptions for your codes to maintain consistency.
4. **Review Regularly**: Periodically review your codes and merge similar ones.
5. **Color Coordination**: Use colors strategically to group related codes.

13.2. Organizing Your Work

1. **Descriptive Names**: Use clear, descriptive names for projects and files.
2. **Regular Backups**: Export your work regularly as backup.
3. **Document Your Process**: Use memos to record your analytical decisions.
4. **Version Control**: Consider copying projects before major changes.

13.3. Getting the Most from Analysis

1. **Explore Different Views**: Try all table views and visualizations to see different patterns.
2. **Use Statistical Tests Carefully**: Ensure you understand the assumptions and requirements.
3. **Combine Methods**: Use quantitative analysis alongside qualitative insights.
4. **Export Everything**: Keep copies of your tables, charts, and statistical results.

14. Troubleshooting Common Issues

14.1. Unexpected Issues

- Check that your internet connection is stable.
- Try refreshing the page if you encounter unexpected behavior.

14.2. File Upload Problems

- **Check File Size**: Large files may take longer to process.
- **Verify Format**: Ensure your file is in a supported format.
- **Try Again**: If upload fails, wait a moment and retry.

14.3. Performance Issues

- **Browser Update**: Ensure you're using an updated browser.
- **Clear Cache**: Clear your browser cache if the application seems slow.
- **Reduce Data**: Very large projects may run slower.

14.4. Getting Help

- Use the bug report/feedback forms in your profile menu.
- Reach out to us by email (You can find contact email on the home page).