

Village

Project Document

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INTRODUCTION

Aims and Objectives of the Project

“It takes a village. We are Village.”



The aim of our project is to develop an application that helps combat loneliness in parents by providing a platform to connect, share knowledge and exchange experiences about parenting. A [recent survey](#) revealed that 79% of respondents would value a way to connect with other parents, and 38% feel they have no one providing them with support in their role as a parent. The app's namesake, “Village” comes from the phrase *“it takes a village”* (meaning a large network is called upon when raising a child) and we want to create and promote this community base for parents who need it.

Objectives:

- **Community:** Create a platform for parents to ask questions, discuss, and comment back.
- **Both offline and online connection:** Provide information on local events based on parents' search criteria. This encourages in-person connection (the app is focused on London for MVP).
- **Mental Health Support:** Offer resources for mental health as part of the forum and event offerings, as a key theme.
- **Filtering Capabilities:** Enable filtering by parent status (e.g., 'I'm a dad', 'I'm a new mother', 'I'm pregnant', 'I'm childfree') to enable targeted interactions.

Roadmap of the Report

1. Background
2. Specifications and Design
3. Implementation and Execution
4. Testing and Evaluation
5. Conclusion

BACKGROUND

The project focuses on developing an app to support parents by providing:

- **A platform to connect and share experiences:** Parents can ask questions and share advice through forums. Community polls provide quick insights into relevant parenting topics, with immediate feedback via polling percentages.
- **A secure community and user profile:** the user has an account and logs in, so discussions are only visible by other members. Behaviour is moderated.
- **Local events and activities:** Customised based on parent's search parameters and shown on a visually-appealing map.
- **Mental health resources and educational content:** Support groups and resources aimed at improving mental health, as well as a wealth of parenting topics.

Understanding the requirements:

- The target audience includes parents-to-be, new parents, and carers of babies and children.
- Parents need support to navigate the challenges of parenting, and Village can provide resources and education to support this.
- Village aims to combat loneliness by creating a safe, supportive community.

SPECIFICATIONS AND DESIGN

Technical Requirements

- **Webpages:** Five main pages including login / registration, user dashboard, events, forum and about us (meet the team). The user will also be able to edit/update their information.
- **Backend:** Node.js/Express, SQL database for data management (e.g. about users and forum posts) and API for interactions with the database. The app will also make use of the Google Maps API and Eventbrite API for searching, finding and displaying locations of events.
- **Frontend Tools:** React and Bootstrap for responsive design and Figma for UI/UX design.

- **Collaboration Tools:** Trello for project management, Miro for brainstorming, Slack for communication and Git/Github for version control and remote repository storage.
- **Additional Features:** scope for development beyond MVP includes user notifications, language translation API interactivity, rating threads and searching the site/threads.

Non-Technical Requirements

- **User Experience:** Simple, intuitive interface with considerations for accessibility.
- **Diversity and Inclusion:** Use of diverse images, dyslexia-friendly fonts, and contrast-tested colours to help those with colour blindness. Gender-neutral colours have been chosen to promote gender inclusion.

Colour Contrast Checker Results

To ensure accessibility, a colour contrast checker was used to evaluate the chosen colours. The results show that the combinations used in the app meet the required standards (tested on <https://colourcontrast.cc/>):

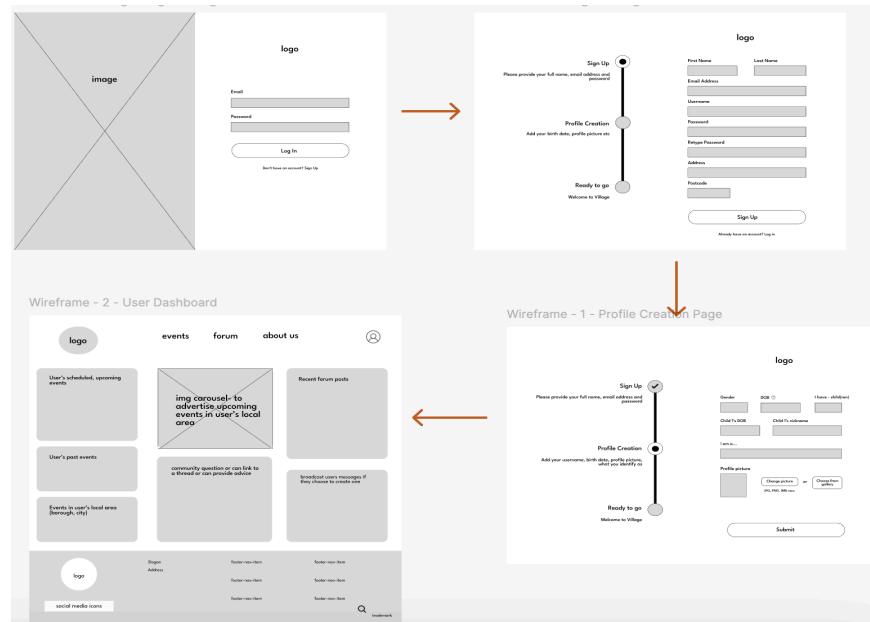
- **Background Colour + Nav Text Colour:** Passes all tests (Contrast Ratio: 13.59).
- **Background Colour + Logo Text Colour/Nav Menu:** Passes 3/4 tests, suitable for large text (Contrast Ratio: 5.97).
- **Background Colour + Nav Item Menus Colour:** Passes 3/4 tests (Contrast Ratio: 5.35).
- **Nav Item Menu Colour + Hover Colour:** Passes all tests (Contrast Ratio: 7.53).

These choices ensure the application is accessible to users with visual impairments, making the content readable and the interface easy to navigate.

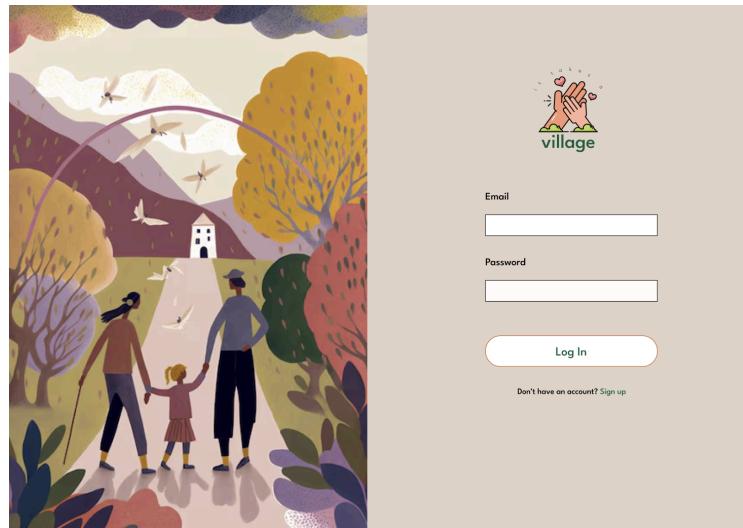
Design and Architecture

Wireframes

1. Homepage: User authentication.



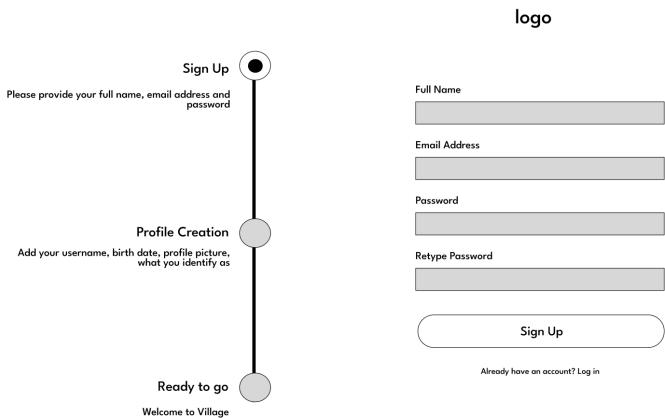
We agreed on an autumnal colour scheme (brown, mauve, green, orange) which is easy on the eyes and best fits the image of 'Village'. This will be the first page the visitor should see. To access the site and be a part of the exclusive Village community, they must have an account. This is done to protect forum and users from public view.



Login page

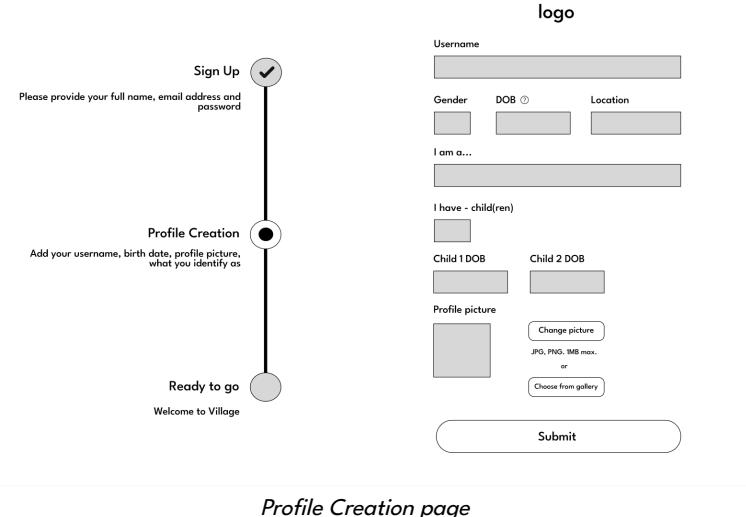
2. Sign Up – User Registration

User clicks 'Sign Up' below the Sign In form to create an account, leading the user to the registration process where they input the account registration details. Form is placed on the right side of the page to maintain a consistent format and to not disrupt the user's attention away from it (the previous page has a form on the right side).



Register page

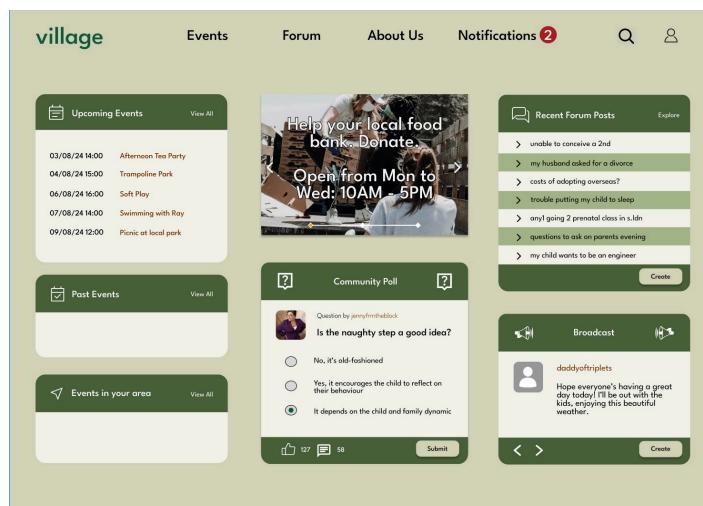
After the user inputs their important details, they go on to provide further information while they are still in the registration process. Some of which may be compulsory to fill in and other fields not. A ‘timeline’ is shown to break down the registration process, making it easier for users to assess where they are at and provides options to go back/next. The link provided below the form will pivot the user back to the login page if they already have an account. **Once signed up, they are now a ‘villager’.**



Profile Creation page

3. User Dashboard

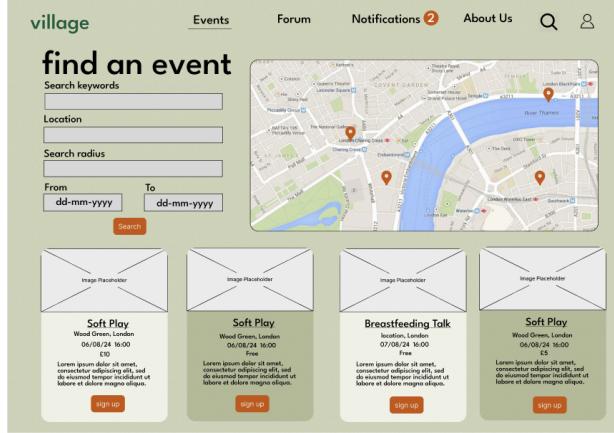
After logging in, villagers are welcomed by the user dashboard where they can view their upcoming (scheduled) events, past events, and events in their local area on the left-hand side of this page. Quick links to their events as well as recent forum posts make it much easier to navigate the site without going through a chain of pages. The dashboard not only provides quick links but offers a sense of community without the user going into the forum with poll and broadcast, where users are able to vote and voice their opinions. The image carousel is placed in the middle to attract users attention to the promoted events/pages and will not autoplay as it may trigger seizures. Villagers will need to interact with the arrows to see other images on the carousel.



User Dashboard

4. Events Page:

Listings of local events: the villager can search on various criteria to find events. Clicking ‘search’ will surface these events on the lower half of the screen and show their respective locations on a Google Map. They can then click on the respective card to go to the external event web page.



Events Page

5. Forum Pages:

Platform for discussion and support: the Village parenting forums show forums at the top level, organised by category (left) and within the category (right). Users can create a forum, reply to a thread and explore other forums. ‘Village picks’ resources are picked by the Village Team on a regular basis to reflect particular topics and current themes.

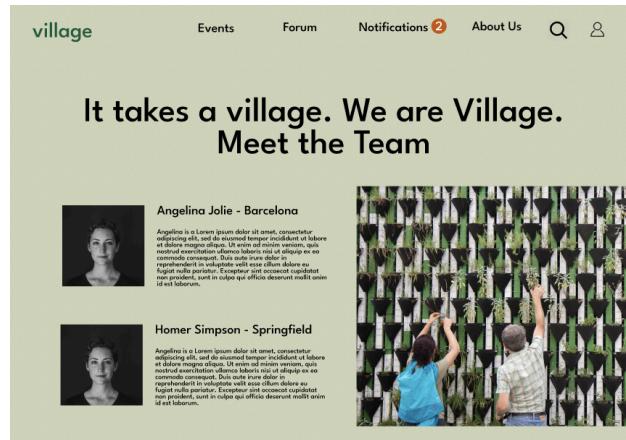
The screenshot shows two panels of the forum interface. The left panel, titled 'All parenting forums', lists categories: 'Becoming a parent', 'Being a parent', 'Being a carer', 'Education', 'Childcare', 'Sleep', 'SEND', 'Mind, body & soul', and 'Charities'. The right panel, titled 'Village picks', lists 'Becoming a parent' threads:

Thread Title	Responses	Last Reply
HELP! 38 weeks and still no name!	22 responses	28/7/24 @ 14:00
Why do I feel useless?	12 responses	28/7/24 @ 13:00
Help with breastfeeding, please!	18 responses	28/7/24 @ 12:40
7 days to go!!!	56 responses	28/7/24 @ 12:00
The November 2024 baby club	92 responses	28/7/24 @ 11:00
Mum keeps offering bad advice!	19 responses	28/7/24 @ 06:00
C-section or induction?! HELP!	87 responses	27/7/24 @ 23:00
Any birth stories?	91 responses	27/7/24 @ 22:00
Any other dads need support?	54 responses	27/7/24 @ 13:00

Forum Pages

6. Meet the Team:

An information page with parallax scrolling to introduce the team members behind Village. The villager can scroll through the team members’ bios and headshots.



Meet the Team Page

- **UI/UX Considerations:** Consistent navigation, easy-to-read fonts, and a colour palette that is pleasing and accessible.

Architecture

- **Frontend:** Bootstrap for a responsive and consistent design. Figma for creating detailed wireframes and UI elements.
- **Backend:** Node.js for server-side logic. SQL database for managing user data, event listings, and forum posts.
- **API Integration:** Integration with Google Maps API for location services, Eventbrite API (or other event site) for event information, and SQL database interactions for backend data management.

IMPLEMENTATION AND EXECUTION

Development Approach and Team Member Roles

- **Agile Development:** Adopted for iterative progress and continuous improvement with week-long sprints and retrospectives.
- **Team Roles:** Roles looking after the Trello board, meeting coordination, Miro, documentation, Figma, testing, and the final presentation have been shared amongst the team. Screens have also been assigned amongst mini ‘teams’ for coding up the first batch of screens in initial sprints.

Tools and Libraries

- Frontend Tools: React, Bootstrap, Figma.
- Backend Tools: Node.js, Express, SQL.
- Collaboration Tools: Trello, Slack, Github, GoogleDocs, Miro, WhatsApp.

Implementation Process

Achievements

- **Initial Wireframes and Prototypes:** Developed and reviewed for user feedback.
- **Backend Setup:** Basic structure and database established.
- **Forum and Event Listings:** researched key functionalities for user interaction and event information, using Eventbrite and Google Maps public APIs.

Challenges

- **User Experience:** Ensuring a seamless and intuitive experience across devices (MVP will focus on desktop only).
- **Real-time Updates:** Implementing efficient mechanisms for live interactions in forums.

Agile Development

- **Iterative Approach:** Regular sprints for incremental progress.
- **Code Reviews and Testing:** Frequent evaluations to ensure quality and functionality.

TESTING AND EVALUATION

Testing Strategy

Functional Testing

- **Objective:** Verify that all features work as intended.
- **Scope:** Includes user registration, event listings, forum discussions, and filtering capabilities.

User Testing

- **Objective:** Collect feedback from target users to improve usability and functionality.
- **Methods:** Beta testing with a selected group of parents to gather insights and suggestions.

System Limitations

- **Scalability:** Potential challenges as the user base grows, requiring efficient backend management.
- **Performance:** Continuous updates and maintenance necessary to handle increasing data and user interactions.

CONCLUSION

The project aims to create a supportive community for parents by addressing loneliness through connectivity and resource sharing: fostering online and offline mutual support.

The app's design focuses on user-friendly features and inclusive content to cater to a diverse audience with a targeted need. Regular testing and agile practices will ensure the app remains functional, scalable, and user-centric.