



POLITECNICO
MILANO 1863

**Hypermedia Applications
Design Document - v1.1**

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June 16th, 2020

Contents

1 Abstract

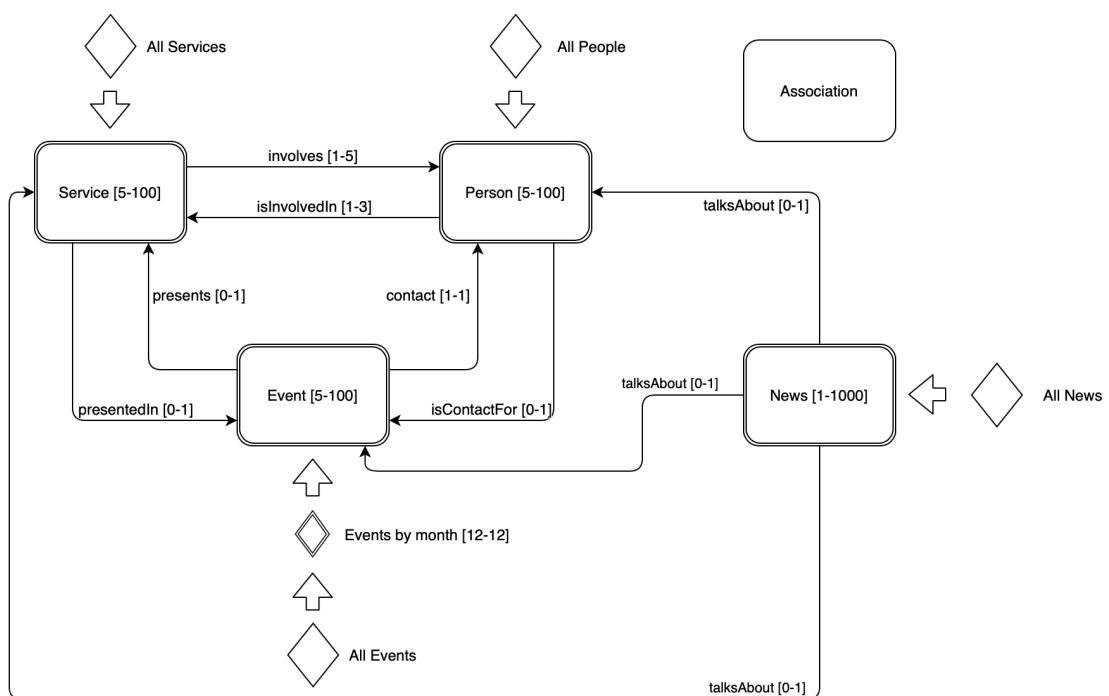
The subject of this document is the design of a website for a voluntary association, specifically a time bank. Section 2 contains the C, L, and P sub-models of the Interactive Dialogue Model (IDM). Section 3 lists 3 possible scenarios of use. Section 4 shows the design in the small for different pages. Finally, Section 5 contains the conceptual and logical database design.

1.1 Version history

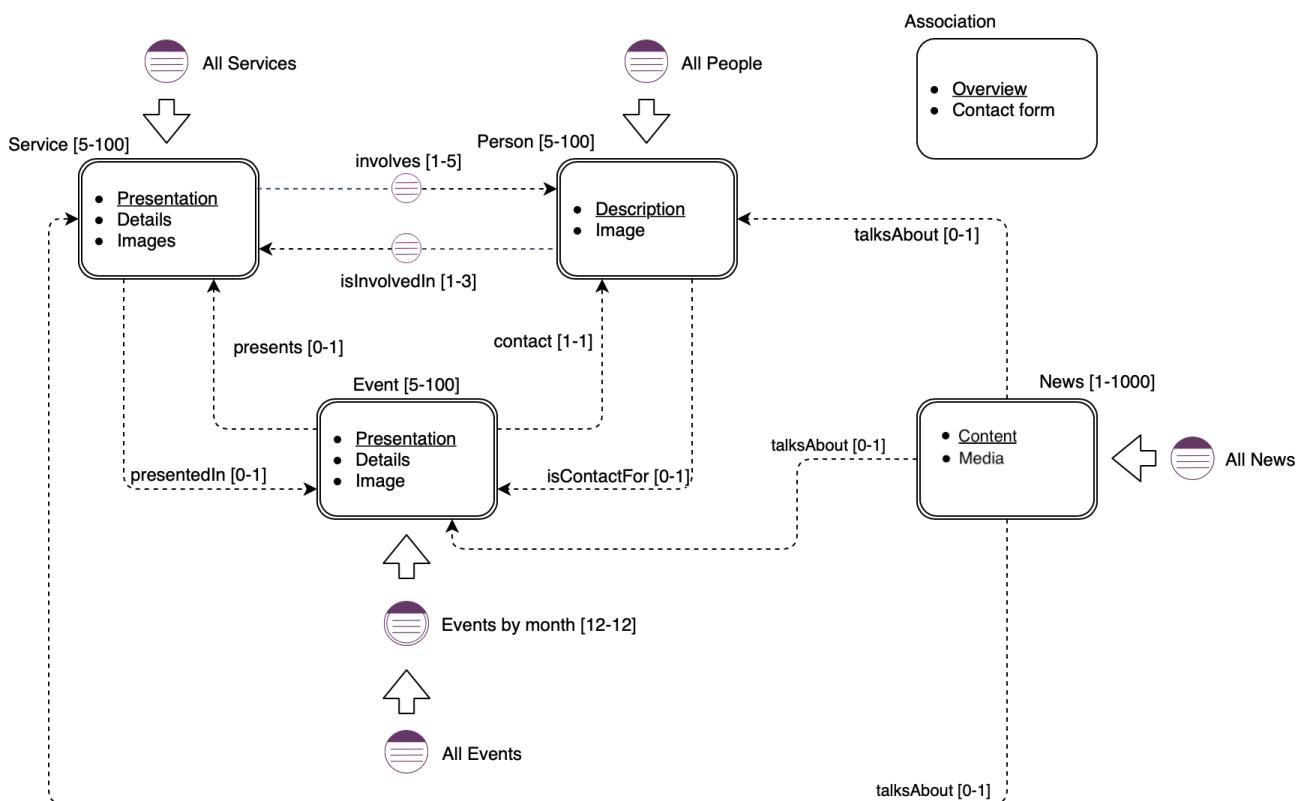
Version	Date	Description
1.0	April 24th, 2020	First release.
1.1	June 16th, 2020	Updated wireframes in order to make the design compliant with the prototype. Replaced mockups with actual screenshots. Updated DB design diagram to include icon in Service table. Fix typo in ER diagram (TalksAbout is now a 0:N relationship). In HomePage's design in the small, changed some transition links to group links after the meeting with the teacher.

2 Graphical representations

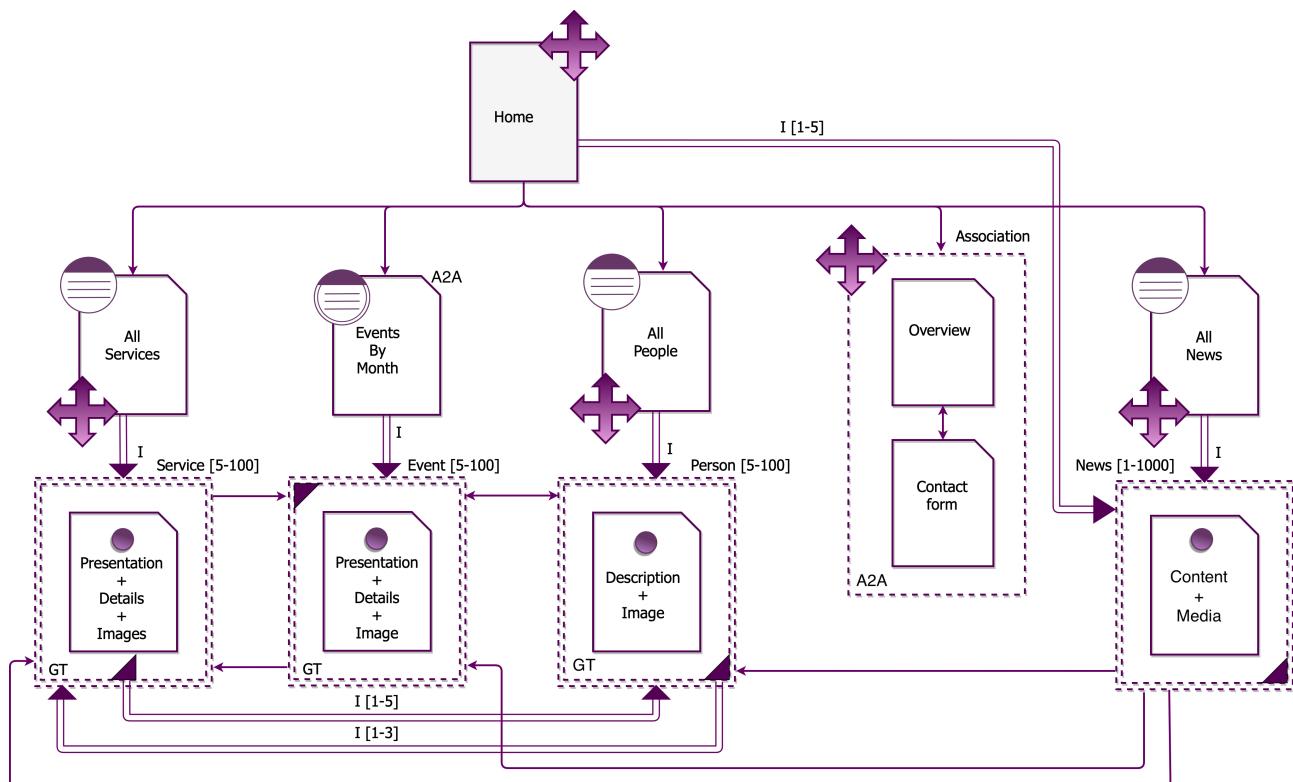
2.1 C-IDM



2.2 L-IDM



2.3 P-IDM



3 Scenarios

3.1 Scenario 1

Carol's parents think their daughter needs tutoring for school, so they look for a person who would be able to help her on the time bank website. They open the website and click on the "Services" button on the navigation bar (Figure ??). A list of the offered services will be then opened, including the link for the tutoring service (Figure ??). After clicking on the link, the parents will see the list of the volunteers that offer tutoring and, by opening the page of one of the volunteers (Figure ??), they can see his contact information (Figure ??).



quality time bank

"QUALITYTIMEBANK IS
PASSIONATE ABOUT
VOLUNTEERING AND
BELIEVES THAT GOOD
QUALITY
VOLUNTEERING CAN
MAKE A POSITIVE
IMPACT ON OUR
SOCIETY."

[Government backs QTB to deliver language project](#)



People

We have the most terrific people in the country.



Services

We offer lots of different services and we are continuously looking for new ones.



Events

Our community just can't stop growing. We organise monthly events to keep you informed about new members and services, or just to have fun together.



Services

Over the years, our organization has expanded over various types of services in different fields. All of them are offered by people of all ages with extreme care and love for the others.



Private tutoring

QualityTimeBank groups volunteers who have been offering tutoring to young people for mult...



English lessons

Talking Together is QualityTimeBank's extensive volunteer-led project offering informal, f...



Carers training

There are more than six million carers across the UK - and one in four Birmingham homes is...



Tech support

There is a belief that the elderly don't like to use computers, and we can assure you that...

1 of 2



Figure 3.1

Figure 3.2



Private tutoring

quality
time
bank



Alessandro Nichelini

Contact for: Christmas party 🎄

Geek, CSE student, Steve Jobs wanna be, temporarily math teacher. Unforgivable romantic. I can help with computers and with private lessons in scientific fields. After a positive high school volunteering experience and an inspiring conference, I decided, along with Luca dell'Oglio and Fabio Codiglioni, to create QualityTimeBank, with the goal of helping the community around us.

Offered services

Private tutoring Math, computer science, physics	Tech support Cybersecurity expert

Offered by



**Alessandro
Nichelini**
Math, computer
science,
physics



**Fabio
Codiglioni**
Math, physics,
chemistry



**Luca
dell'Oglio**
History and
Math



**Anthony
Stark**
Entrepreneurship



**Bruce
Banner**
I'm good at
everything

Categories

People

Services

Events

News

About Us

177 Bleecker Street

+91-9399878398

info@qualitytimebank.com

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Categories

People

Services

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News

About Us

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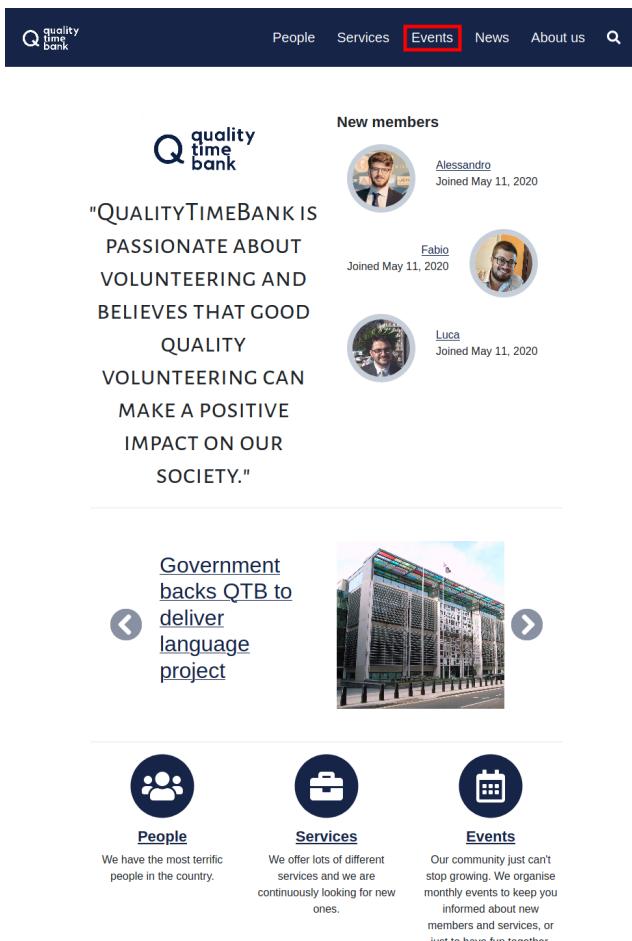
©QualityTimeBank2020

Figure 3.3

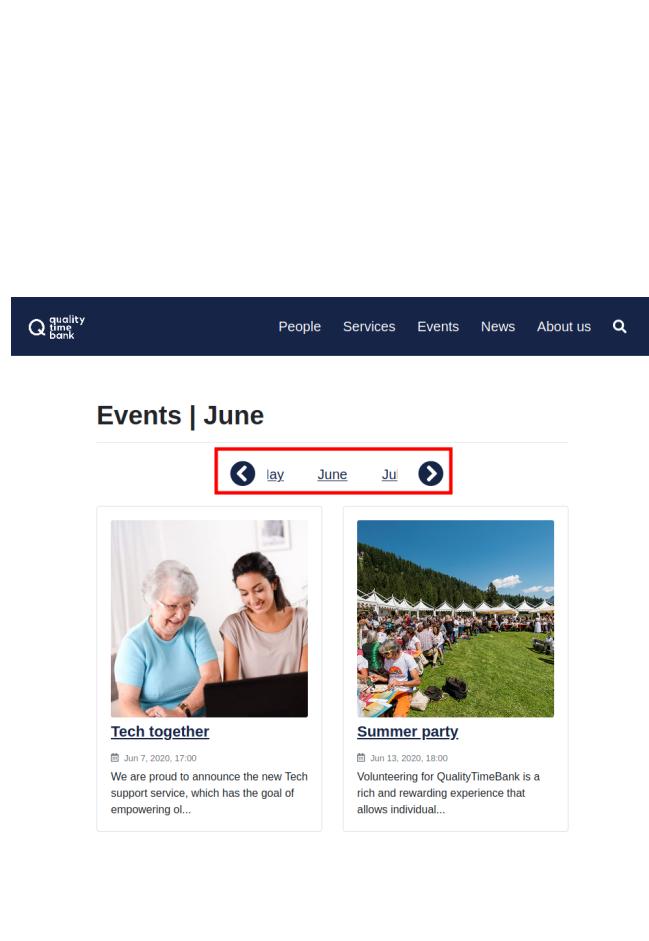
Figure 3.4

3.2 Scenario 2

Giovanni has been an English teacher for the last twenty years, and his New Year's resolution is to share his knowledge with other people. He has heard from a friend that the QualityTimeBank is presenting an English lessons service in July, so he searches the event. By clicking the "Events" button on the home page (Figure ??), he reaches the page containing the events of the current month, which is June. By navigating the carousel (Figure ??), he reaches the page of that month, where he finds the event he's looking for (Figure ??). By clicking on the link, he reaches the page of the event (Figure ??).



The screenshot shows the homepage of the QualityTimeBank website. At the top, there's a dark header bar with the logo "Q quality time bank" on the left and navigation links "People", "Services", "Events" (which is highlighted with a red border), "News", "About us", and a search icon on the right. Below the header, there's a large quote from the founder: "QUALITYTIMEBANK IS PASSIONATE ABOUT VOLUNTEERING AND BELIEVES THAT GOOD QUALITY VOLUNTEERING CAN MAKE A POSITIVE IMPACT ON OUR SOCIETY." To the right of the quote, there's a section titled "New members" featuring three circular profile pictures of Alessandro, Fabio, and Luca, each with their names and the date "Joined May 11, 2020". On the far right, there's a sidebar with sections for "People", "Services", "Events", "News", "About us", and a search icon.



The screenshot shows the "Events | June" page. At the top, there's a navigation bar with arrows pointing left and right, and the month "June" highlighted with a red border. Below the navigation, there are two event cards. The first card is titled "Tech together" and features a photo of an older woman and a younger woman looking at a laptop together. It includes the date "Jun 7, 2020, 17:00" and a brief description: "We are proud to announce the new Tech support service, which has the goal of empowering ol...". The second card is titled "Summer party" and features a photo of a large outdoor picnic with many people. It includes the date "Jun 13, 2020, 18:00" and a brief description: "Volunteering for QualityTimeBank is a rich and rewarding experience that allows individual...".

Figure 3.5

Figure 3.6

The screenshot shows the 'Events | July' page. At the top, there's a navigation bar with links for People, Services, Events, News, About us, and a search icon. Below the navigation is a breadcrumb trail: 'Events > July'. The main content area features a grid of event cards. One card, titled 'Talking together' with a sub-headline 'Presenting: English lessons', is highlighted with a red border. This card includes a photo of a group of women, a date ('Jul 14, 2020, 12:00'), and a brief description: 'We are proud to announce the launch of our new service, which will offer informal, functional English teaching to marginalised UK residents with little or no knowledge of the language - mostly women. Our Talking Groups gave 300 learners the chance to develop their English further with a focus on setting goals for future learning and using English to improve health and well-being, job prospects and engagement with children's education. We're hugely proud of the achievements of our learners and volunteers, and thank them all for their hard work and dedication to the project. Now, with this new service, we hope to do even better.' Below the card are icons for Date (Jul 14, 2020, 12:00), Place (Headquarters), and Contact (Jane Foster).

The footer section contains the 'Categories' menu (People, Services, Events, News) and links for About Us and contact information (info@qualitytimebank.com). It also includes the QualityTimeBank logo and the copyright notice '©QualityTimeBank2020'.

Figure 3.7

The footer section contains the 'Categories' menu (People, Services, Events, News) and links for About Us and contact information (info@qualitytimebank.com). It also includes the QualityTimeBank logo and the copyright notice '©QualityTimeBank2020'.

Figure 3.8

3.3 Scenario 3

The organizer of the annual Christmas party of the association has lost the phone number of the contact for the event. She clicks the "Events" button on the home page (Figure ??), and she opens the event of the current month, which is June. She navigates the carousel (Figure ??), and reaches the events of December. From there she reaches the page of the event (Figure ??), where she can find the link of the personal page of the contact for the event (Figure ??), which contains the phone number of the contact.

Header Navigation: People, Services, **Events**, News, About us, Search.

New members:

- Alessandro (Joined May 11, 2020)
- Fabio (Joined May 11, 2020)
- Luca (Joined May 11, 2020)

QualityTimeBank Mission Statement:

"QUALITYTIMEBANK IS PASSIONATE ABOUT VOLUNTEERING AND BELIEVES THAT GOOD QUALITY VOLUNTEERING CAN MAKE A POSITIVE IMPACT ON OUR SOCIETY."

Government backs QTB to deliver language project:

Categories: People, Services, Events

We have the most terrific people in the country. We offer lots of different services and we are continuously looking for new ones. Our community just can't stop growing. We organise monthly events to keep you informed about our members and services, or just to have fun together.

Address: 177 Bleecker Street, +91-9399678398, info@qualitytimebank.com

Events | June:

Tech together: June 7, 2020, 17:00. We are proud to announce the new Tech support service, which has the goal of empowering...

Summer party: June 13, 2020, 18:00. Volunteering for QualityTimeBank is a rich and rewarding experience that allows individual...

Categories: People, Services, Events, News, About Us

Events | December:

Christmas party: Dec 25, 2019, 19:30. Volunteers are the lifeblood of QualityTimeBank, across all services and projects from our...

Address: 177 Bleecker Street, +91-9399678398, info@qualitytimebank.com

Categories: People, Services, Events, News, About Us

Christmas party:

Volunteers are the lifeblood of QualityTimeBank, across all services and projects from our children's centre to our befriending schemes. Equally important are the individuals who give up their time to keep the organization running day-to-day - covering reception, working in the garden, doing small DIY and administrative bits and bobs to keep us going. Over the last year we have approximately 150 volunteers, many of whom have been with us for years. It would be impossible to keep going without them so it was only right that we threw them an amazing Xmas bash! Complete with minbar, mulled wine, nibbles, a visit from Santa (amazing how much he manages to drop by the centre this time of year...) and a bit of a boogie.

Date: Dec 25, 2019, 19:30
Place: Fancy disco
Contact: Alessandro Nichelini

Address: 177 Bleecker Street, +91-9399678398, info@qualitytimebank.com

4 Design in the small

4.1 Home page

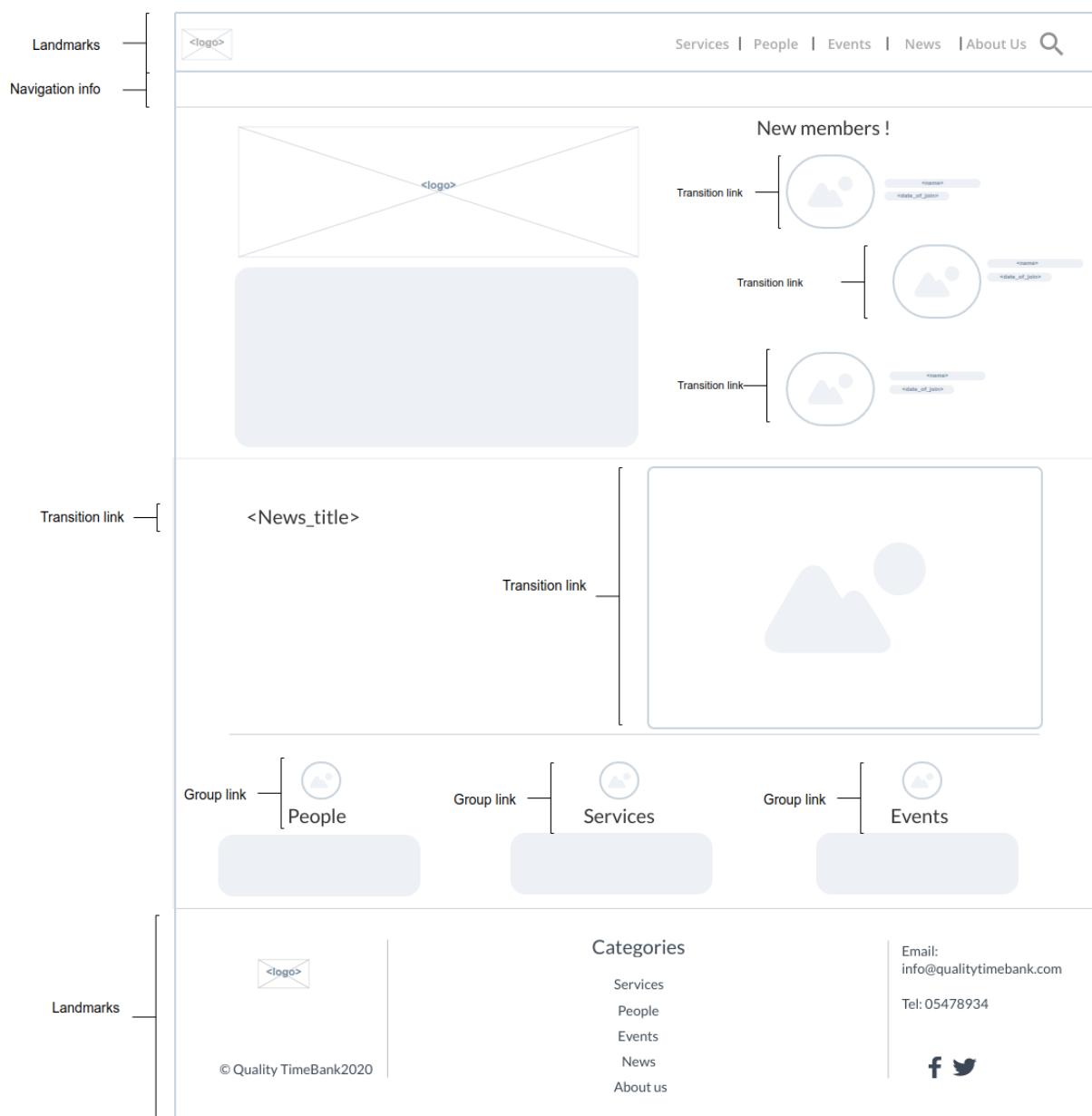


Figure 4.1: Wireframe

The mockup illustrates the homepage of the QualityTimeBank website, featuring a dark blue header bar at the top and a main content area below. The header includes the QTB logo, a search bar, and navigation links for People, Services, Events, News, About us, and a magnifying glass icon. A green bracket on the right side is labeled "Landmarks".

New members

- Alessandro (Joined May 11, 2020)
- Fabio (Joined May 11, 2020)
- Luca (Joined May 11, 2020)

Transition link

"QUALITYTIMEBANK IS PASSIONATE ABOUT VOLUNTEERING AND BELIEVES THAT GOOD QUALITY VOLUNTEERING CAN MAKE A POSITIVE IMPACT ON OUR SOCIETY."

Government backs QTB to deliver language project

Group link

Categories

- People
- Services
- Events
- News
- About Us

Landmarks

Content Sections:

- People:** We have the most terrific people in the country.
- Services:** We offer lots of different services and we are continuously looking for new ones.
- Events:** Our community just can't stop growing. We organise monthly events to keep you informed about new members and services, or just to have fun together.

Footer:

- QTB logo
- ©QualityTimeBank2020
- 177 Bleecker Street
- +91-9399878398
- info@qualitytimebank.com

Figure 4.2: Mockup

4.2 Topic: Association

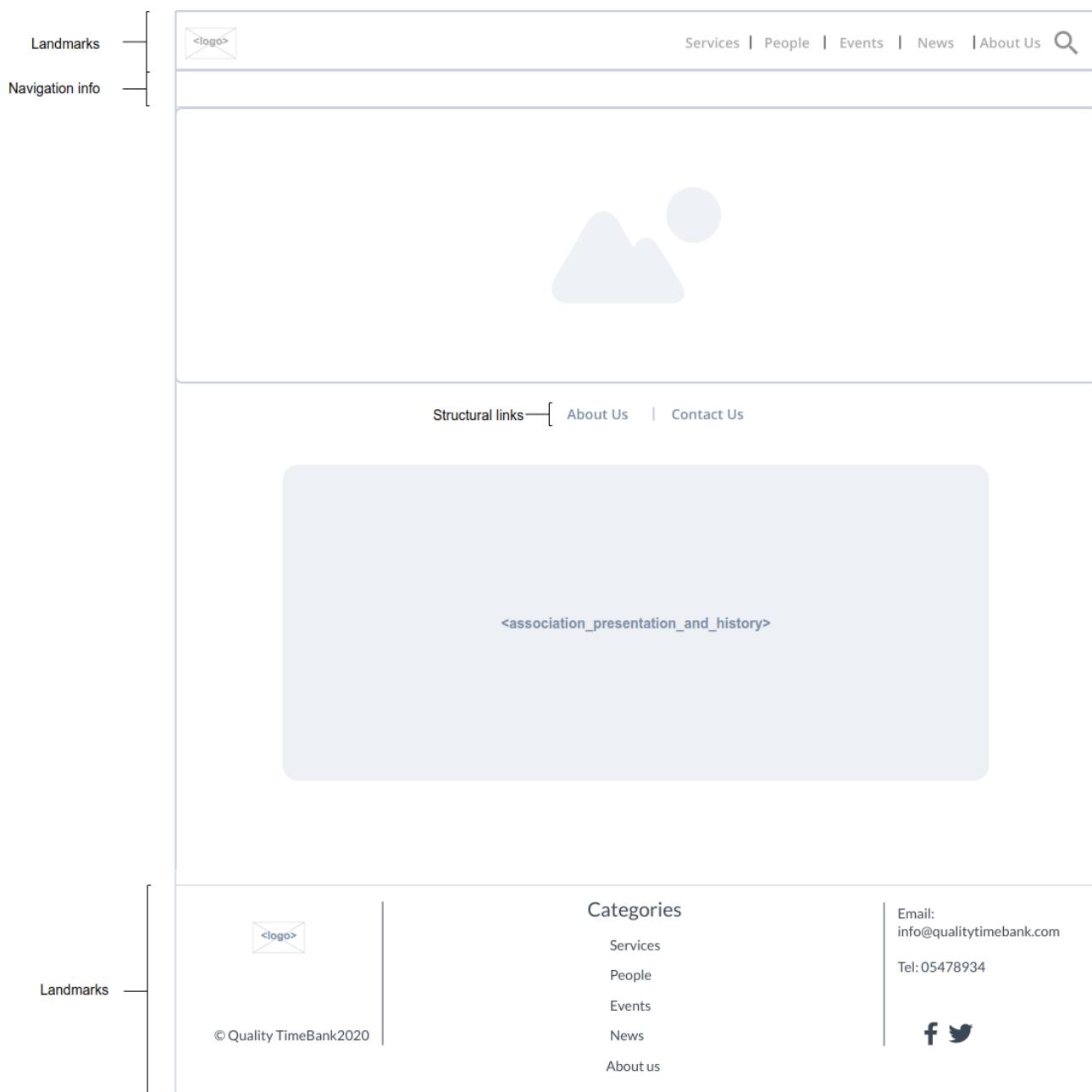


Figure 4.3: Wireframe

Landmarks



Content From Content Dialogue Act

Structural links

About Us Contact Us

What is a Time Bank?

A Time Bank deals with an alternative currency - time; not money. For every hour you spend helping someone, you are entitled to an hour's help in return. It's about neighbours helping neighbours. Help can be in many forms - performing practical tasks, befriending someone, running errands, sharing food grown in the garden, etc.

How does it work?

Each person's time "credits" are credited to their "account" in the Time Bank. People can then withdraw time from their account when they would like help with something themselves. These transactions are done via a co-ordinator / broker who keeps all the accounts and matches people who want help, with someone who can help them. When the task is complete, the accounts will have a record of the number of hours traded by each person.

Join our Community

Our Time Bank is a community of diverse people who can find a project or a space where they can spend time and share skills with others as they wish. Whilst the exchange of skills is a core aspect of time banking, our members are often in the time bank for the relationships and shared experiences of belonging, and feeling useful and valued in the projects and activities they partake in. By getting involved, our members help shape the ethos and values of the time bank.

Landmarks

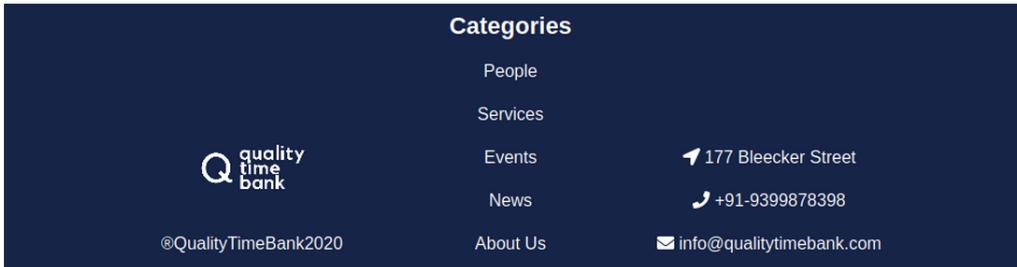


Figure 4.4: Mockup

4.3 Kind of Topic: Person

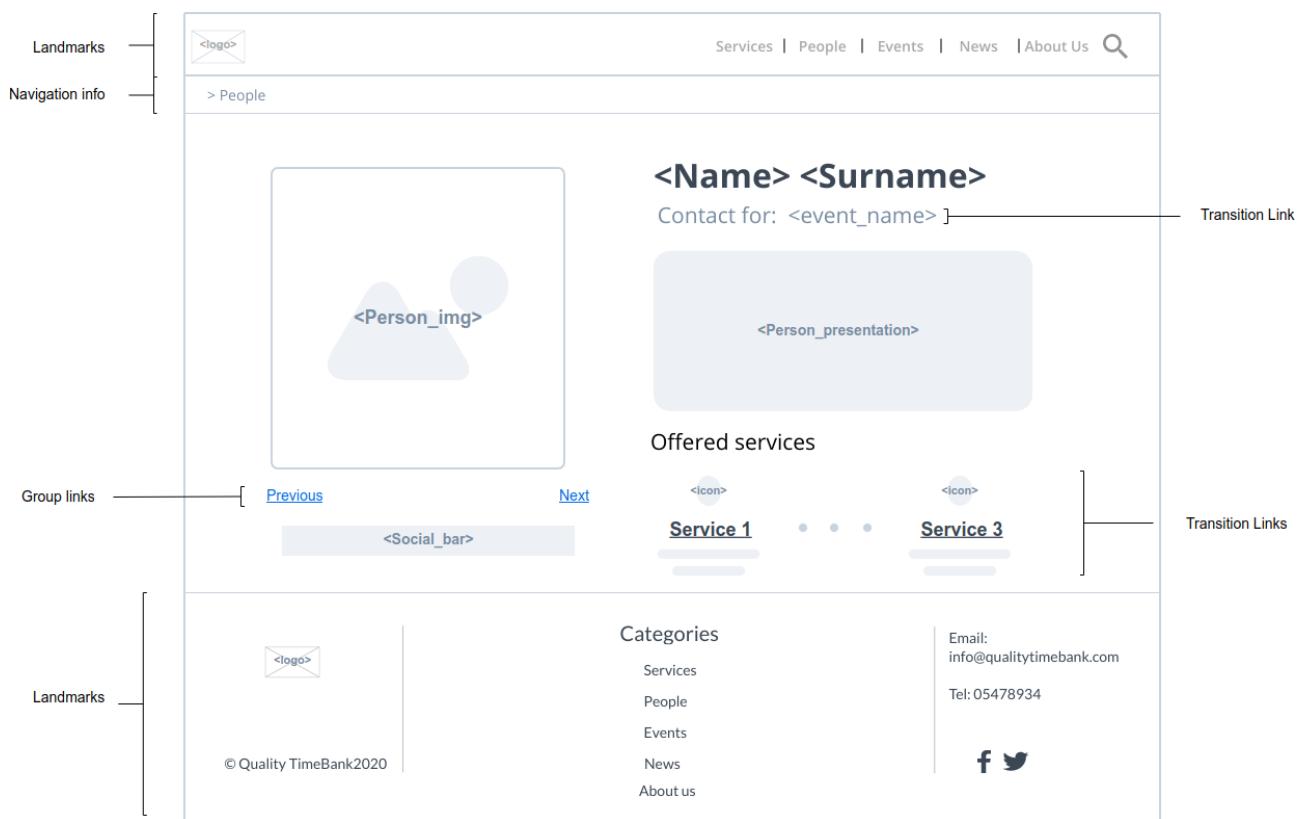


Figure 4.5: Wireframe

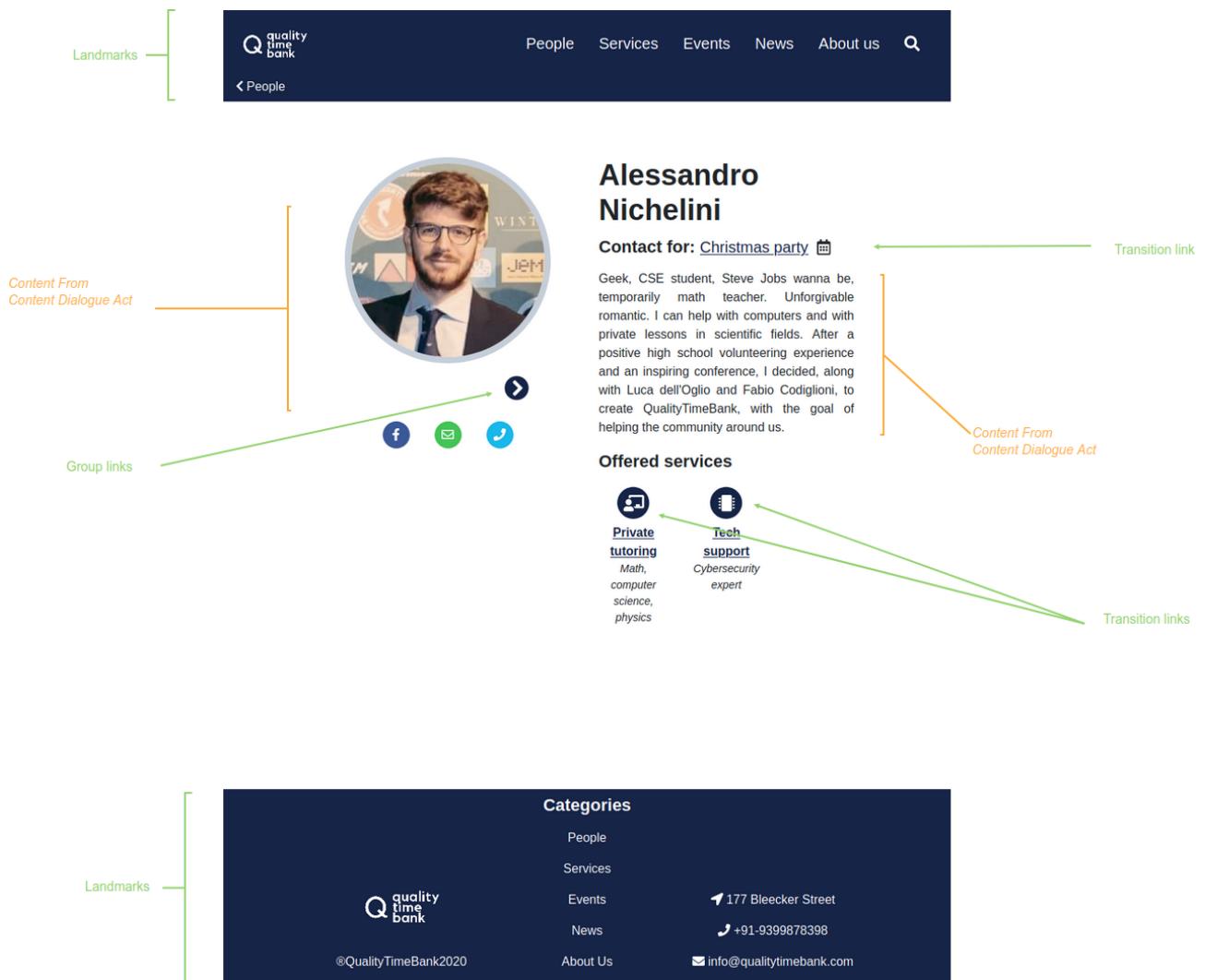


Figure 4.6: Mockup

4.4 Kind of Topic: Service

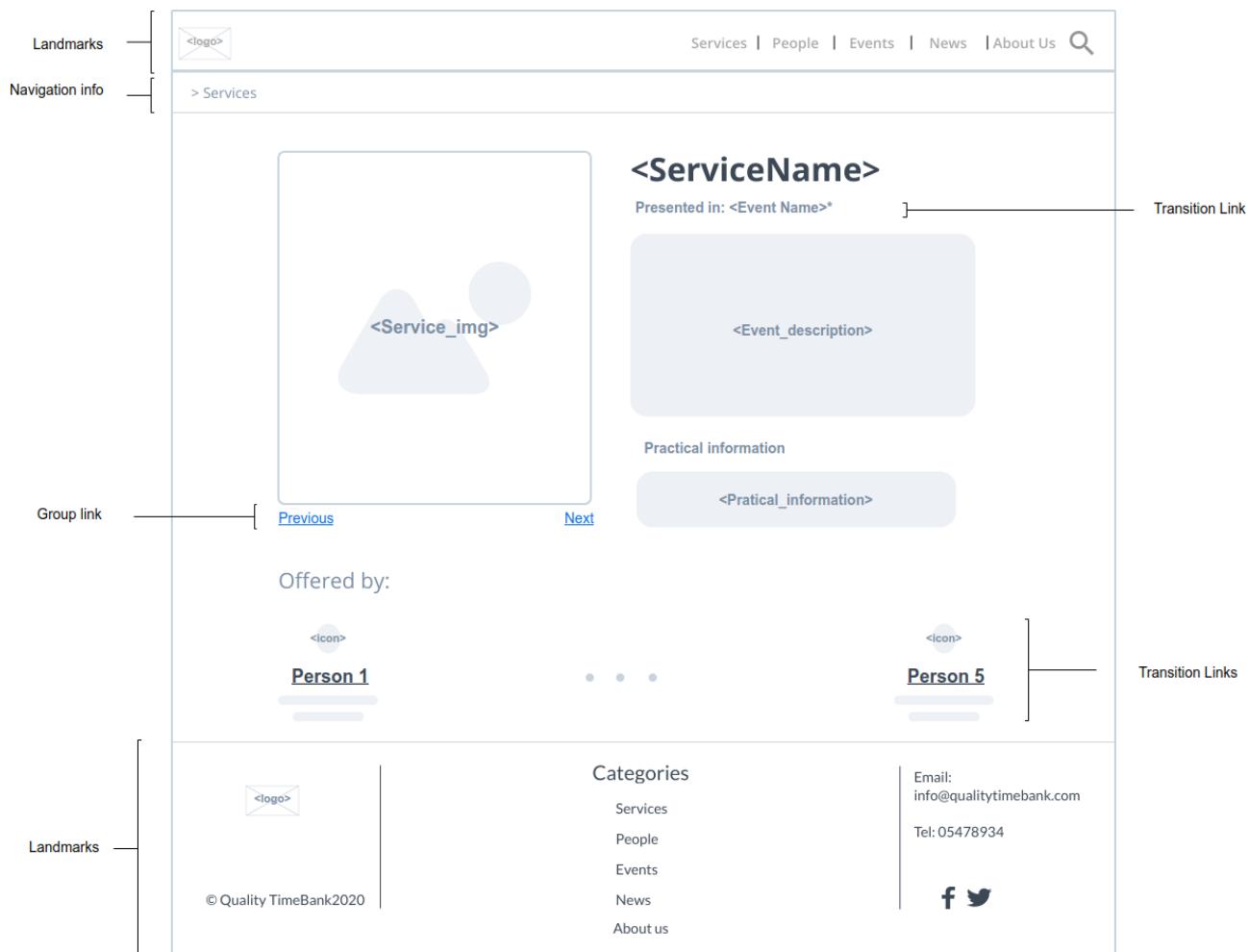


Figure 4.7: Wireframe

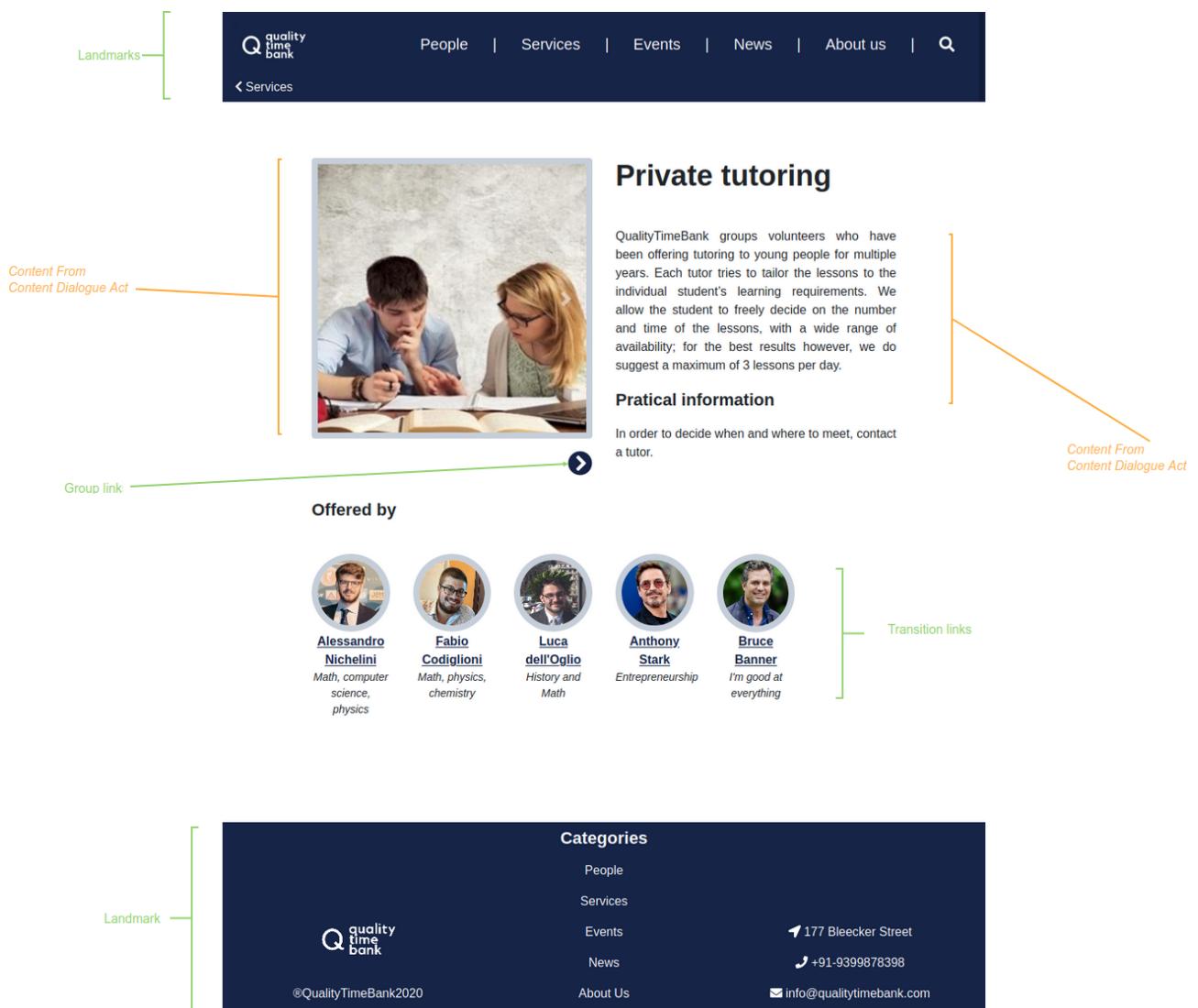


Figure 4.8: Mockup

4.5 Kind of Topic: Event

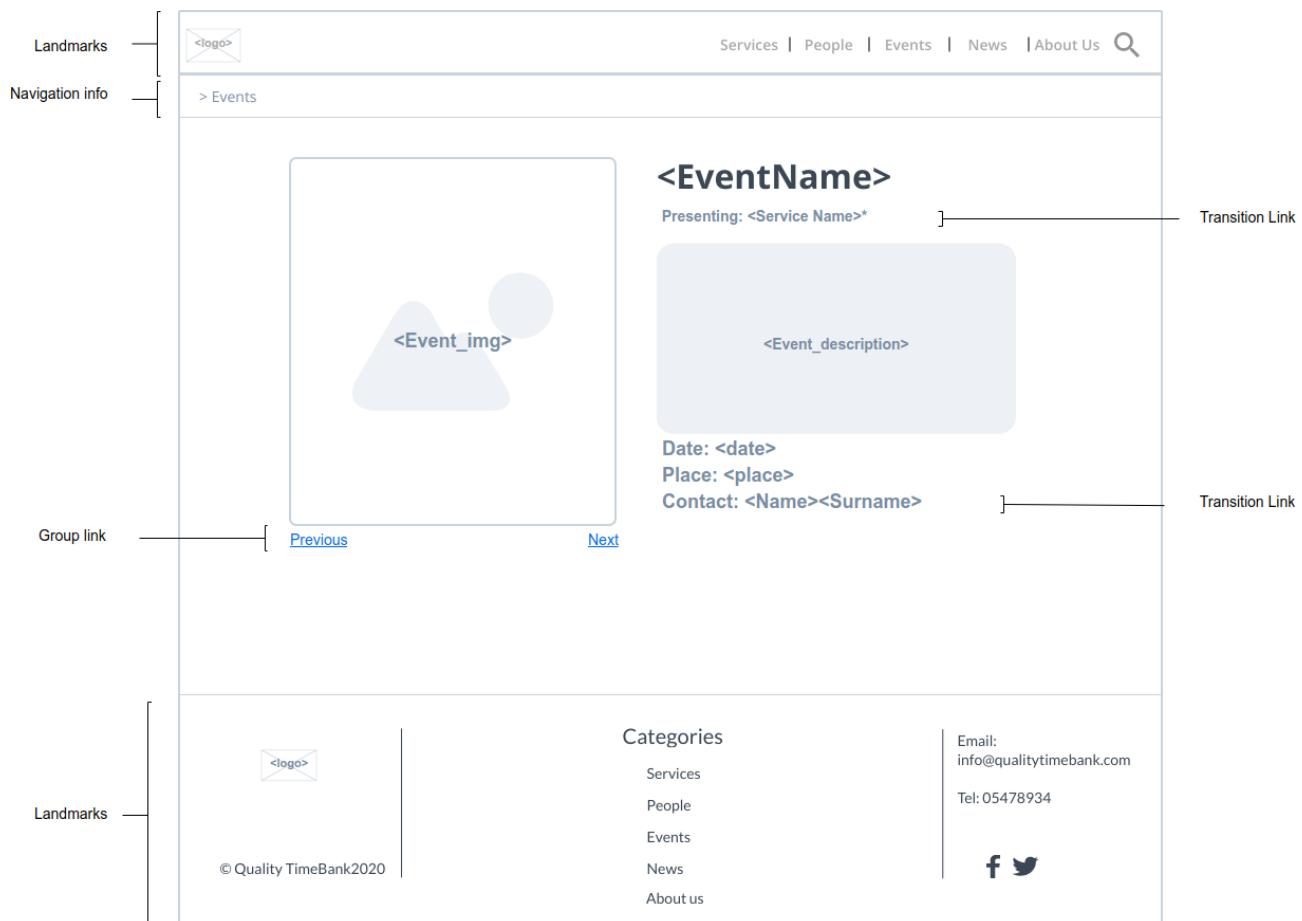


Figure 4.9: Wireframe

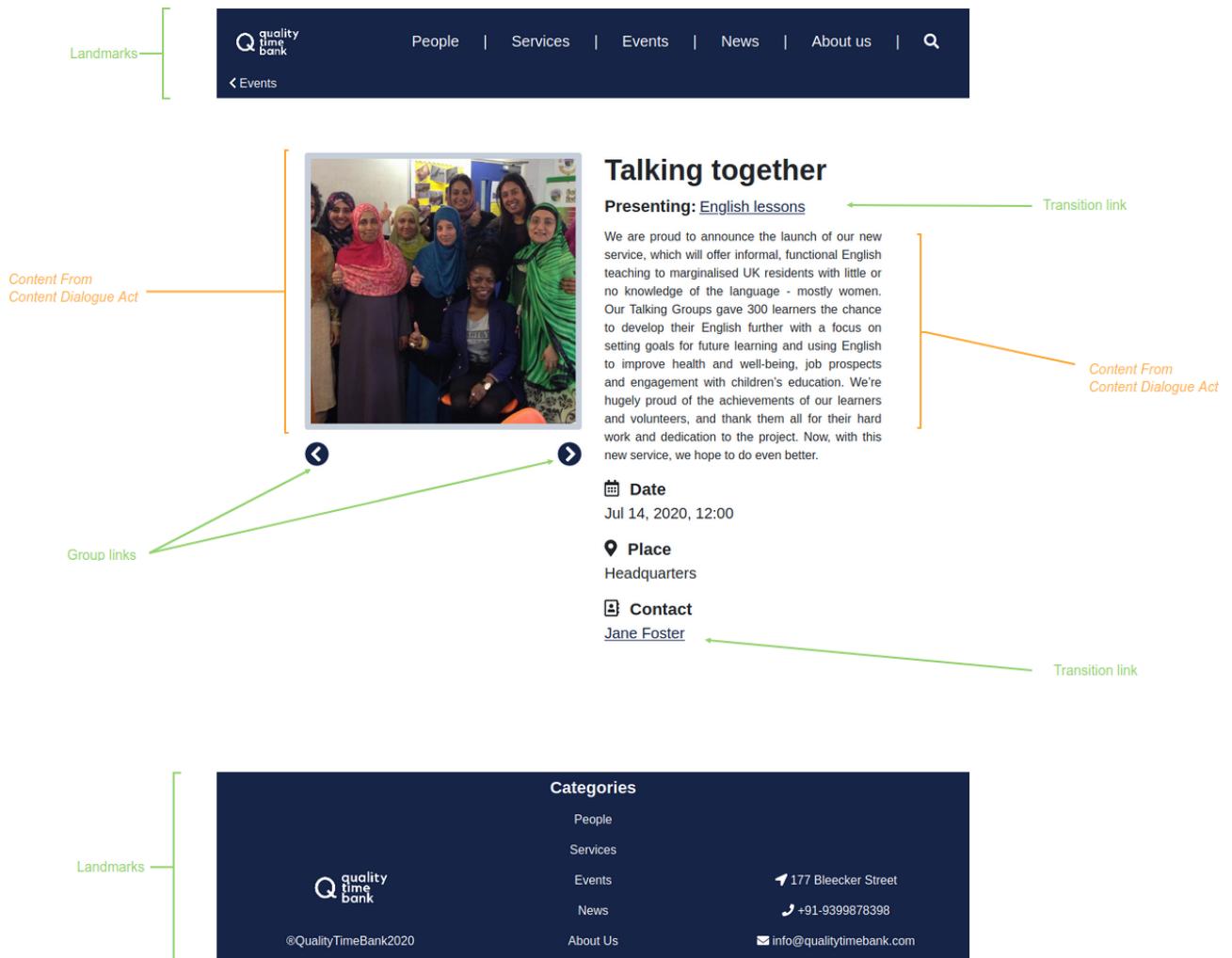


Figure 4.10: Mockup

4.6 Introductory page: People

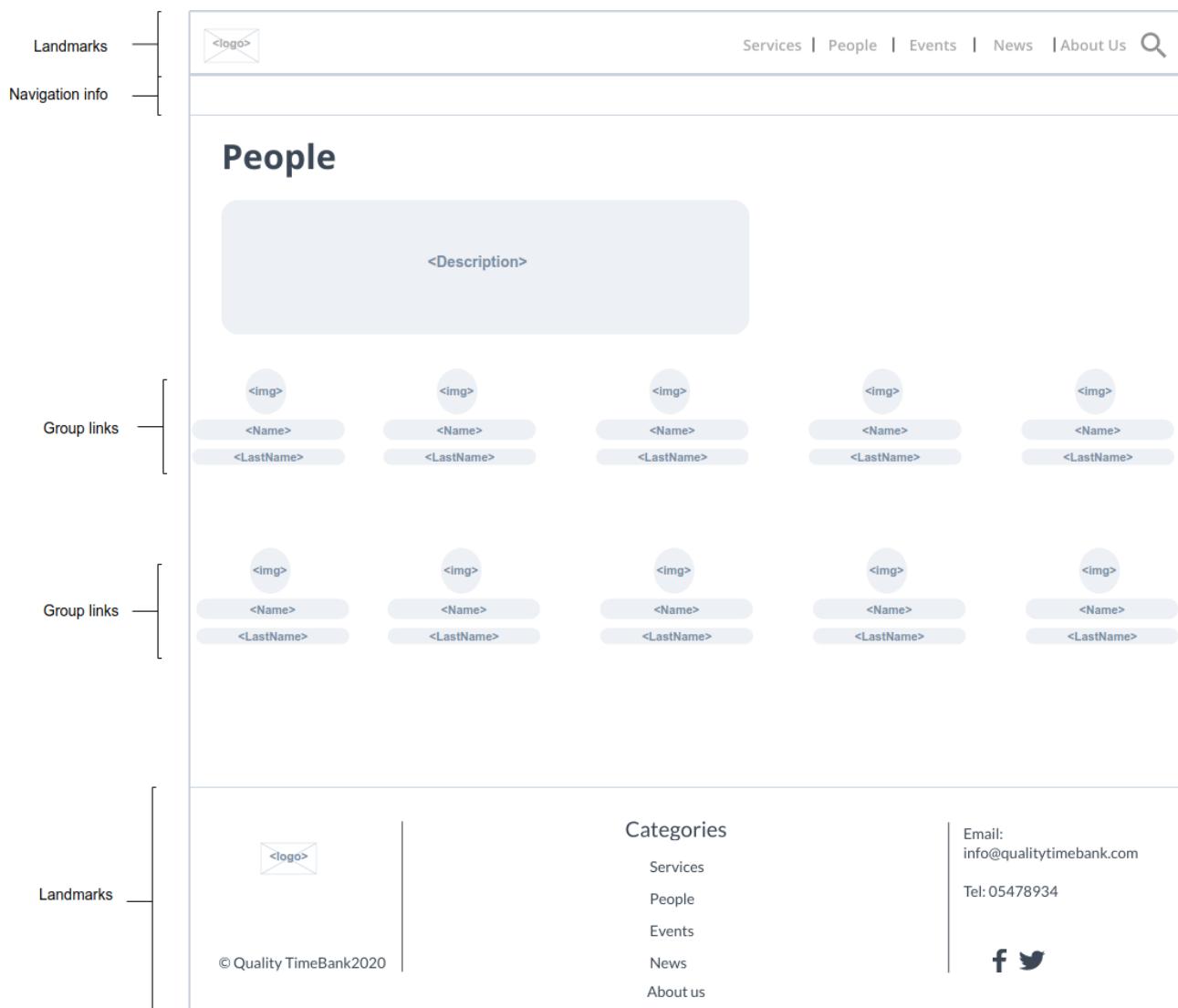


Figure 4.11: Wireframe

People

Timebanks come in all different shapes and sizes. Our membership reflects this diversity. We now have approximately 300 members across the UK in a range of different fields. In this section you can look at our members.

Alessandro Nichelini	Fabio Codiglioni	Luca dell'Oglio	Anthony Stark	Natasha Romanoff	Bruce Banner
Steve Rogers	Jane Foster	Carol Danvers	Margaret Carter	Pepper Potts	Peter Parker
Maria Hill	Clint Barton				

Categories

- [People](#)
- [Services](#)
- [Events](#)
- [News](#)
- [About Us](#)

177 Bleecker Street
+91-9399878398
info@qualitytimebank.com

Figure 4.12: Mockup

4.7 Introductory page: Services

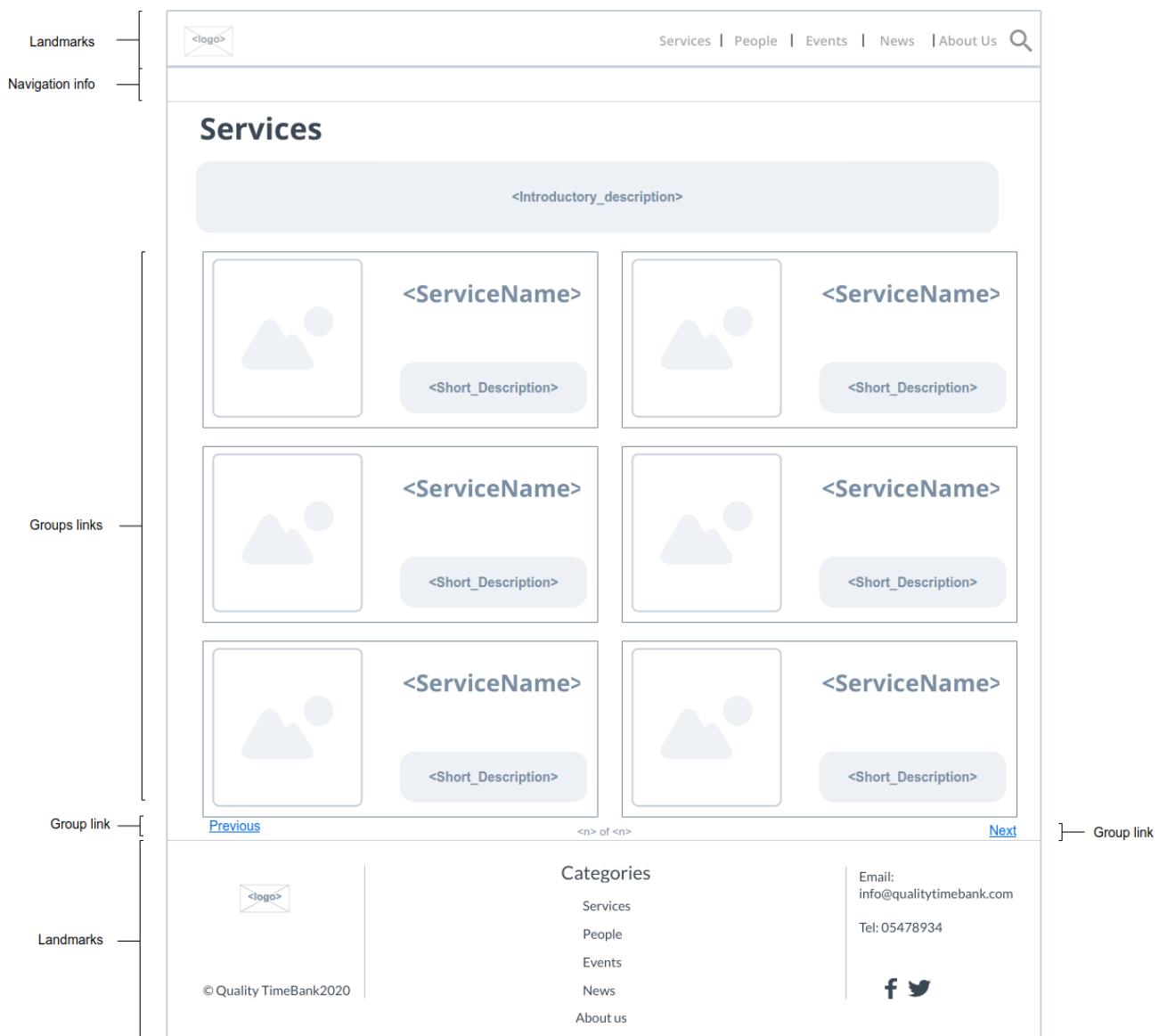


Figure 4.13: Wireframe

Landmarks []


[People](#) | [Services](#) | [Events](#) | [News](#) | [About us](#) |

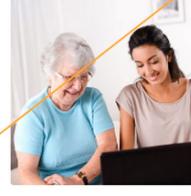
Services

Over the years, our organization has expanded over various types of services in different fields. All of them are offered by people of all ages with extreme care and love for the others.

 **Private tutoring**
QualityTimeBank groups volunteers who have been offering tutoring to young people for mult...

 **English lessons**
Talking Together is QualityTimeBank's extensive volunteer-led project offering informal, f...

 **Carers training**
There are more than six million carers across the UK - and one in four Birmingham homes is...

 **Tech support**
There is a belief that the elderly don't like to use computers, and we can assure you that...

Content From Introductory Dialogue Act

Content From Content Dialogue Act

Groups links []

Groups links []

Landmarks []



Categories

- [People](#)
- [Services](#)
- [Events](#)
- [News](#)
- [About Us](#)

1 of 2 

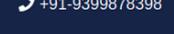
©QualityTimeBank2020  177 Bleecker Street
 +91-9399878398
 info@qualitytimebank.com

Figure 4.14: Mockup

4.8 Introductory page: Events

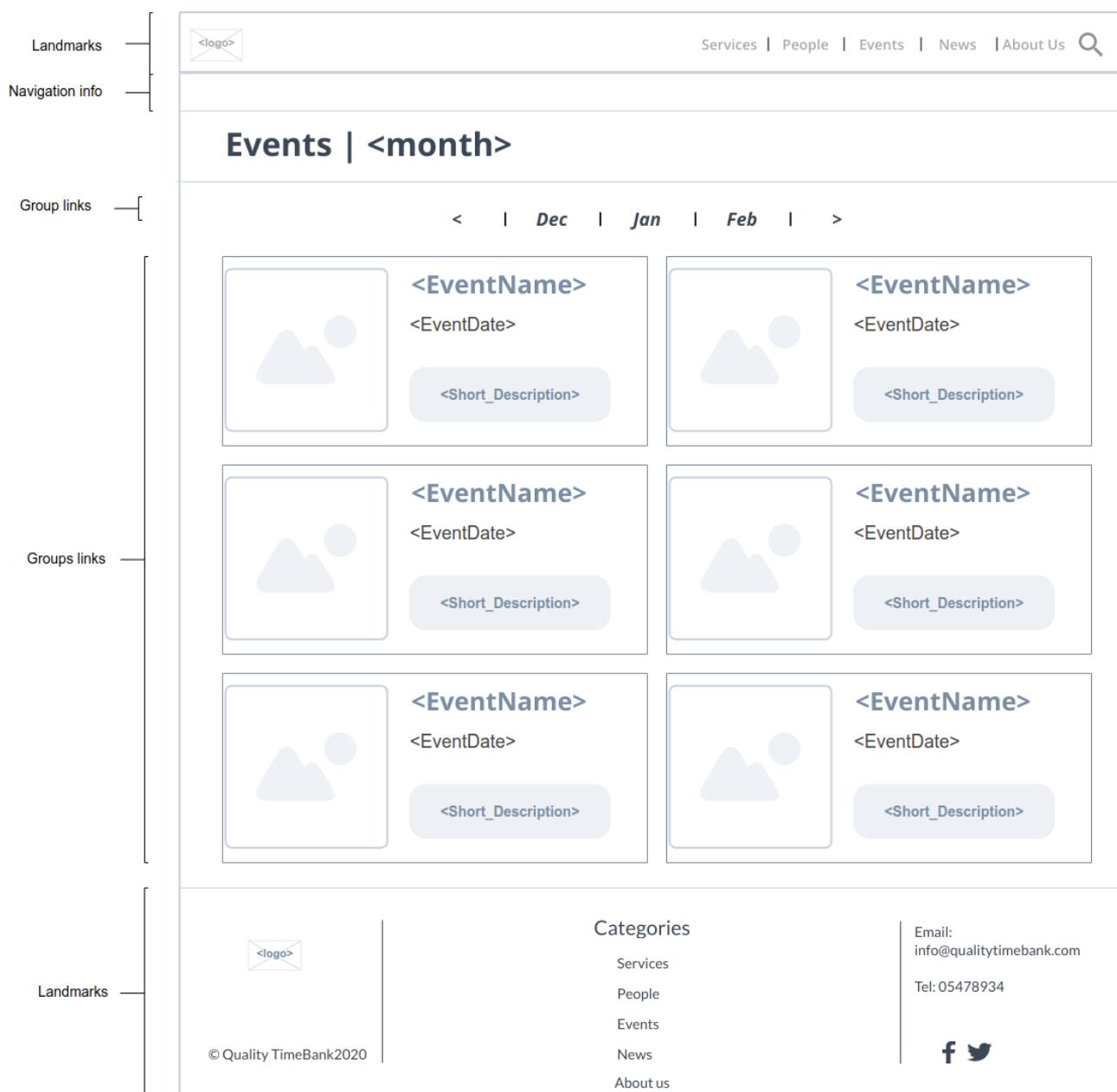


Figure 4.15: Wireframe

The mockup displays two main sections of the website:

Events | July

This section includes a navigation bar with links for People, Services, Events, News, About us, and a search icon. Below the navigation is a horizontal timeline with month icons for June, July, and August, followed by a "Group links" button. A large image of a diverse group of women is shown, with the caption "Talking together". Below the image is a summary of an event: "Jul 14, 2020, 12:00" and "We are proud to announce the launch of our new service, which will offer informal, functio...". A green bracket on the right side of the timeline is labeled "Group links". An orange bracket at the bottom points to the text "Content From Content Dialogue Act".

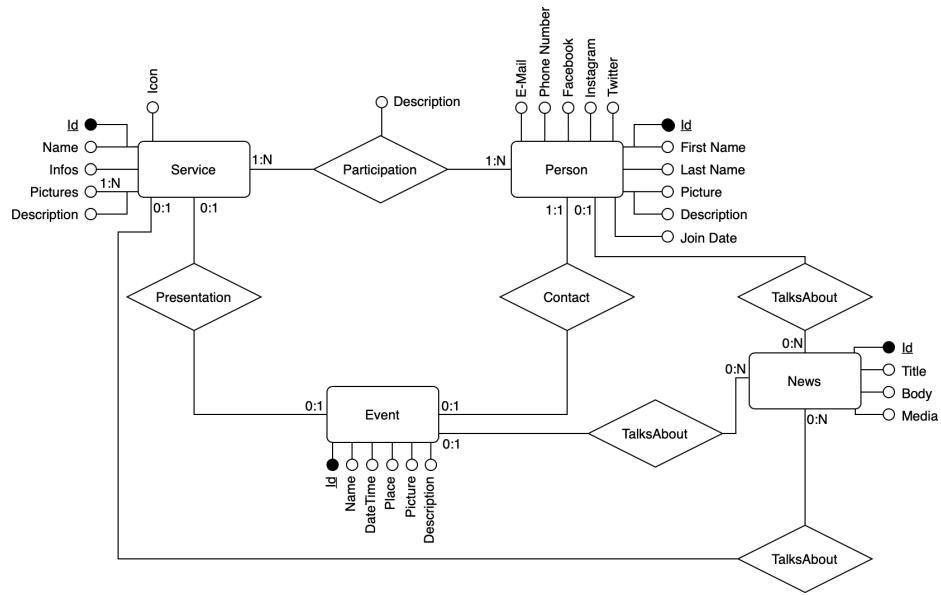
Categories

The footer section features the Quality Time Bank logo, copyright information ("©QualityTimeBank2020"), and links to People, Services, Events, News, About Us, and contact information ("177 Bleecker Street", "+91-9399878398", "info@qualitytimebank.com"). A green bracket on the left side of the footer is labeled "Landmarks".

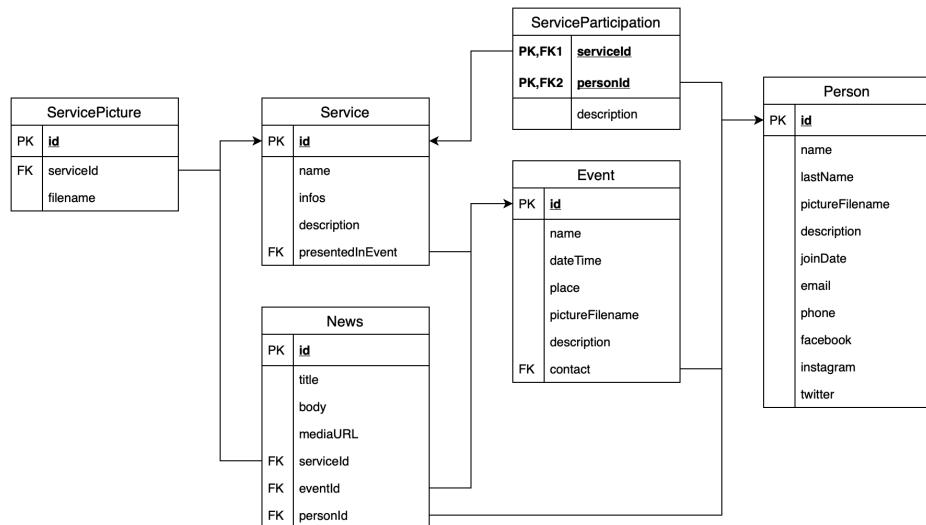
Figure 4.16: Mockup

5 Database design

5.1 ER

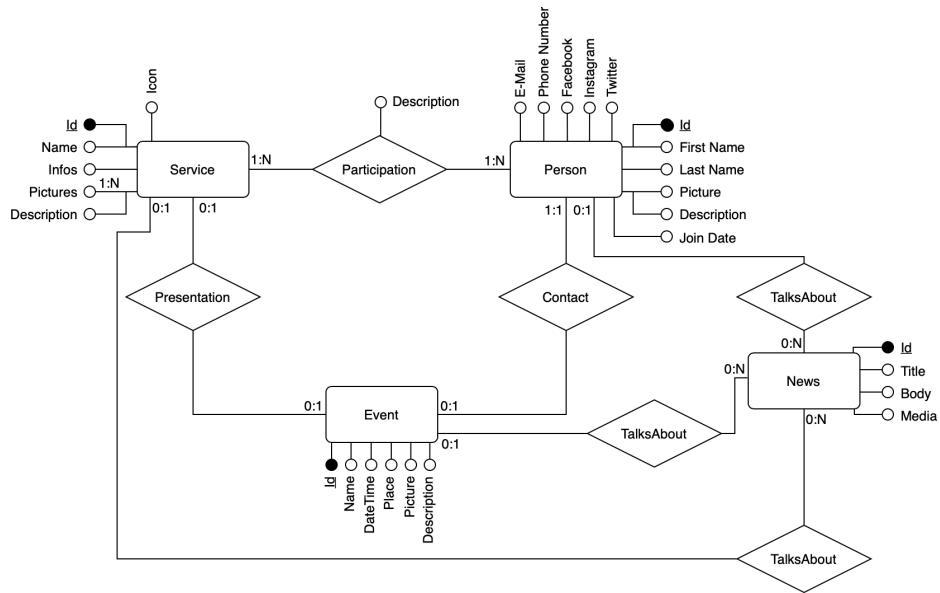


5.2 Relational tables



5 Database design

5.1 ER



5.2 Relational tables

