



**POLITECNICO**  
**MILANO 1863**

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

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# 1 Abstract

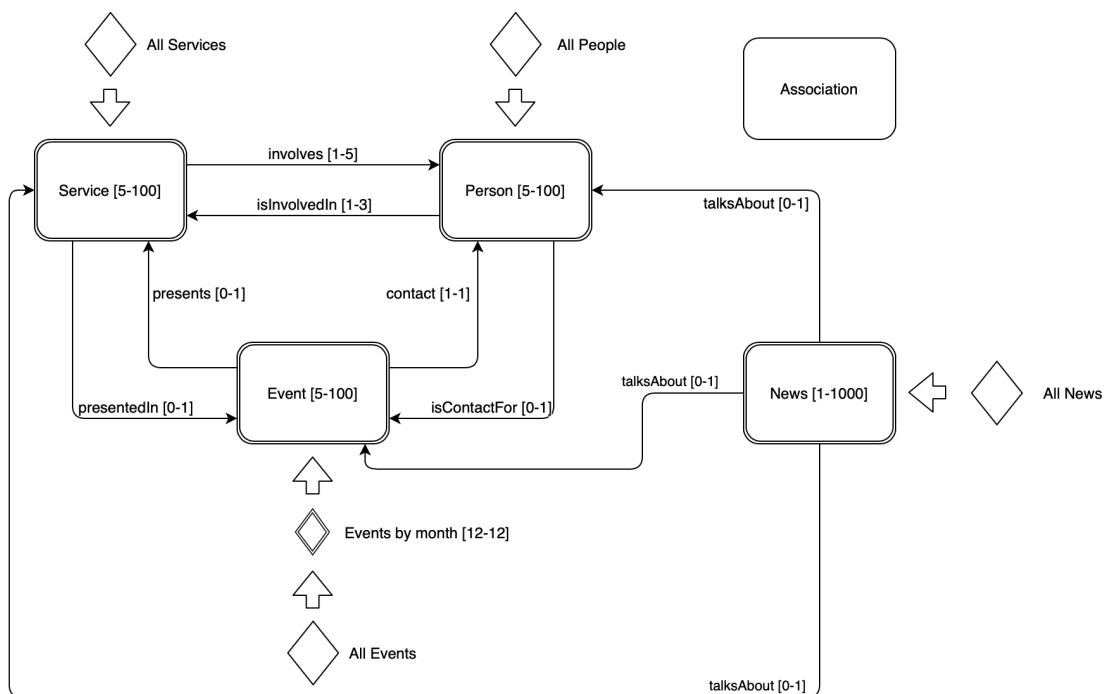
The subject of this document is the design of a website for a voluntary association, specifically a time bank. Section 2 contains the C, L, and P sub-models of the Interactive Dialogue Model (IDM). Section 3 lists 3 possible scenarios of use. Section 4 shows the design in the small for different pages.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

## 1.1 Version history

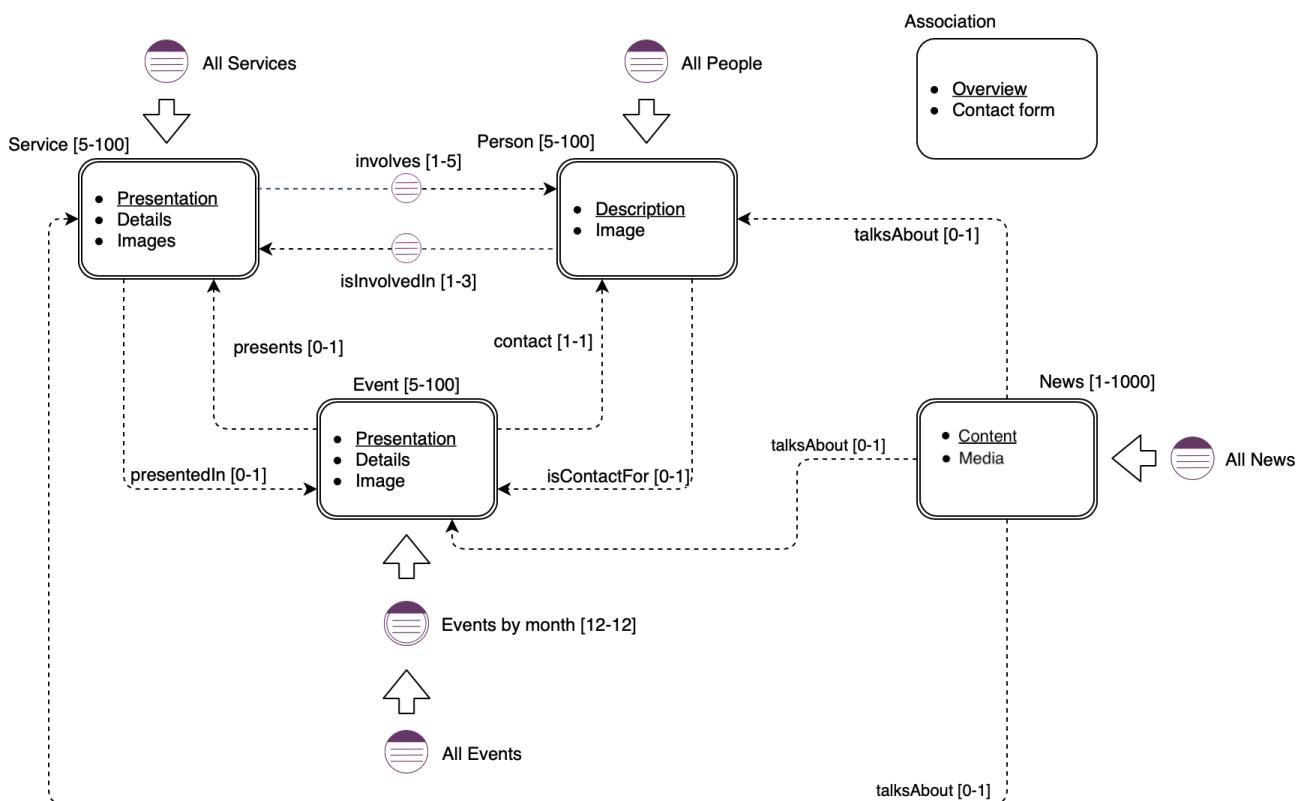
Version	Date	Description
1.0	April 24th, 2020	First release.
1.1	June 16th, 2020	Updated wireframes in order to make the design compliant with the prototype. Replaced mockups with actual screenshots. Updated DB design diagram to include icon in Service table. Fix typo in ER diagram (TalksAbout is now 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

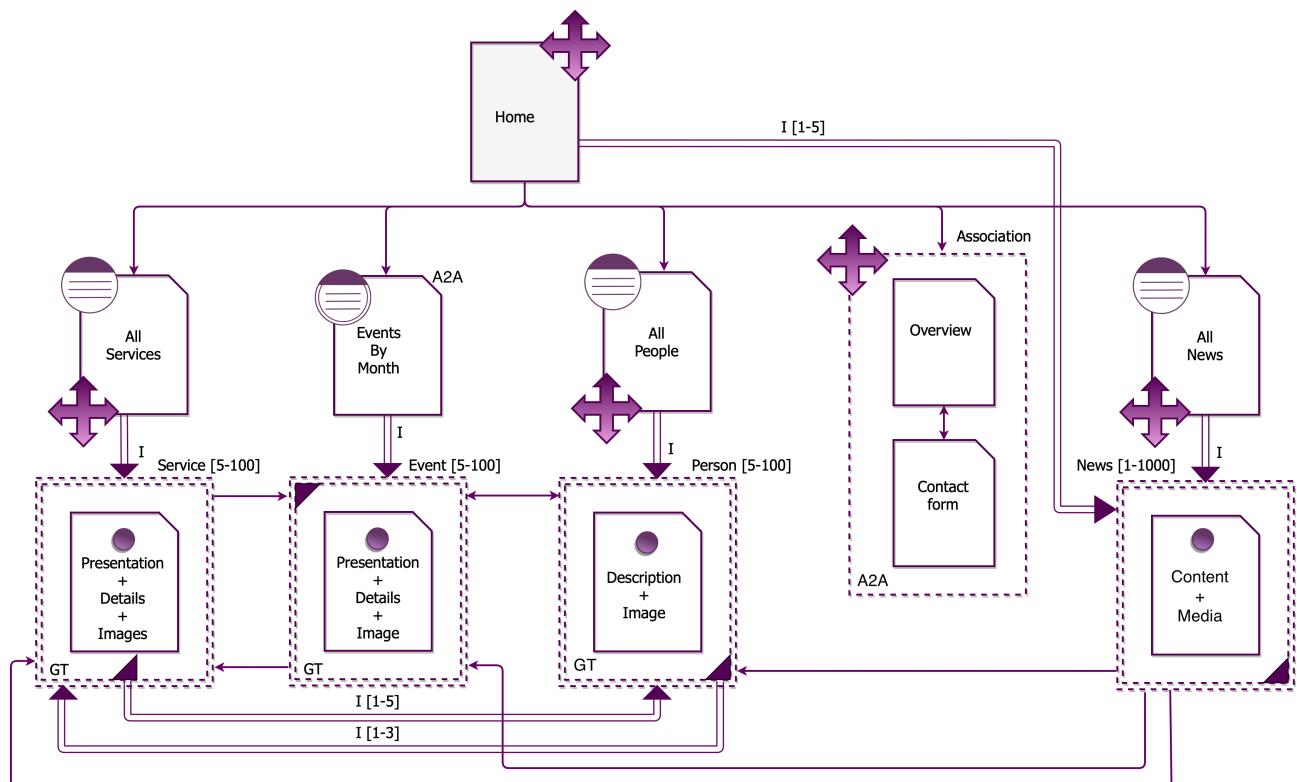
### 2.1 C-IDM



## 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 3.1). A list of the offered services will be then opened, including the link for the tutoring service (Figure 3.2). 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 3.3), they can see his contact information (Figure 3.4).



**quality time bank**

People Services Events News About us 

**New members**

Alessandro Joined May 11, 2020

Fabio Joined May 11, 2020

Luca Joined May 11, 2020

"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 

**Categories**

People  
Services  
Events  
News  
**About Us**  
©QualityTimeBank2020  info@qualitytimebank.com

**Categories**

People  
Services  
Events  
News  
**About Us**  
©QualityTimeBank2020  info@qualitytimebank.com

Figure 3.1

Figure 3.2

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 3.5), he reaches the page containing the events of the current month, which is June. By navigating the carousel (Figure 3.6), he reaches the page of that month, where he finds the event he's looking for (Figure 3.7). By clicking on the link, he reaches the page of the event (Figure 3.8).

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.

The main content area features 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." Below the quote, there's a section titled "New members" showing profiles of three new members: Alessandro (Joined May 11, 2020), Fabio (Joined May 11, 2020), and Luca (Joined May 11, 2020).

On the left side, there's a sidebar with three categories: "People" (represented by a people icon), "Services" (represented by a briefcase icon), and "Events" (represented by a calendar icon). Each category has a brief description and a "Read more" link.

On the right side, there's a section titled "Events | June" with a navigation bar showing "May", "June", and "July". It lists two events: "Tech together" (Jun 7, 2020, 17:00) and "Summer party" (Jun 13, 2020, 18:00), each with a thumbnail image and a brief description.

Figure 3.5

The screenshot shows the footer section of the QualityTimeBank website. It includes the "Q quality time bank" logo, a "Categories" section with links to "People", "Services", "Events", "News", and "About Us", and a "Contact" section with address (177 Bleecker Street), phone number (+91-9399878398), email (info@qualitytimebank.com), and copyright information (@QualityTimeBank2020).

Figure 3.6

**Events | July**

**Talking together**

Jul 14, 2020, 12:00

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.

**Date**  
Jul 14, 2020, 12:00

**Place**  
Headquarters

**Contact**  
[Jane Foster](#)

**Categories**

- People
- Services
- Events
- News

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

©QualityTimeBank2020

Figure 3.7

**Categories**

- People
- Services
- Events
- News

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

©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 3.9), and she opens the event of the current month, which is June. She navigates the carousel (Figure 3.10), and reaches the events of December. From there she reaches the page of the event (Figure 3.11), where she can find the link of the personal page of the contact for the event (Figure 3.12), which contains the phone number of the contact.

The screenshot shows the homepage of the QualityTimeBank website. At the top, there is a navigation bar with links for People, Services, **Events**, News, and About us, along with a search icon. Below the navigation bar, there is a section titled "New members" featuring three profile pictures of Alessandro, Fabio, and Luca, each with their names and the date they joined (May 11, 2020). To the left, there is a quote: "QUALITYTIMEBANK IS PASSIONATE ABOUT VOLUNTEERING AND BELIEVES THAT GOOD QUALITY VOLUNTEERING CAN MAKE A POSITIVE IMPACT ON OUR SOCIETY." Below the quote, there is a news item titled "Government backs QTB to deliver language project" with a thumbnail image of a building and a "Read more" button. At the bottom, there are three circular icons labeled "People", "Services", and "Events", each with a brief description.

Figure 3.9

The screenshot shows the events section for June. At the top, there is a navigation bar with links for People, Services, **Events**, News, and About us, along with a search icon. Below the navigation bar, there is a title "Events | June" with a calendar navigation bar showing May, June, July, and August. There are two event cards: "Tech together" (June 7, 2020, 17:00) and "Summer party" (June 13, 2020, 18:00). Each card has a thumbnail image, a title, a date, and a brief description.

Figure 3.10

The screenshot shows the events section for December. At the top, there is a navigation bar with links for People, Services, **Events**, News, and About us, along with a search icon. Below the navigation bar, there is a title "Events | December" with a calendar navigation bar showing November, December, and January. There is one event card: "Christmas party" (Dec 25, 2019, 19:30) with a thumbnail image of two people holding festive signs.

Figure 3.9

The screenshot shows the events section for December. At the top, there is a navigation bar with links for People, Services, **Events**, News, and About us, along with a search icon. Below the navigation bar, there is a title "Events | December" with a calendar navigation bar showing November, December, and January. There is one event card: "Christmas party" (Dec 25, 2019, 19:30) with a thumbnail image of two people holding festive signs. The event details include a date, place, contact information, and a red box highlighting the contact name.

Figure 3.10

The screenshot shows the events section for December. At the top, there is a navigation bar with links for People, Services, **Events**, News, and About us, along with a search icon. Below the navigation bar, there is a title "Events | December" with a calendar navigation bar showing November, December, and January. There is one event card: "Christmas party" (Dec 25, 2019, 19:30) with a thumbnail image of two people holding festive signs. The event details include a date, place, contact information, and a red box highlighting the contact name.

Figure 3.11

The screenshot shows the events section for December. At the top, there is a navigation bar with links for People, Services, **Events**, News, and About us, along with a search icon. Below the navigation bar, there is a title "Events | December" with a calendar navigation bar showing November, December, and January. There is one event card: "Christmas party" (Dec 25, 2019, 19:30) with a thumbnail image of two people holding festive signs. The event details include a date, place, contact information, and a red box highlighting the contact name.

Figure 3.12

# 4 Design in the small

## 4.1 Home page

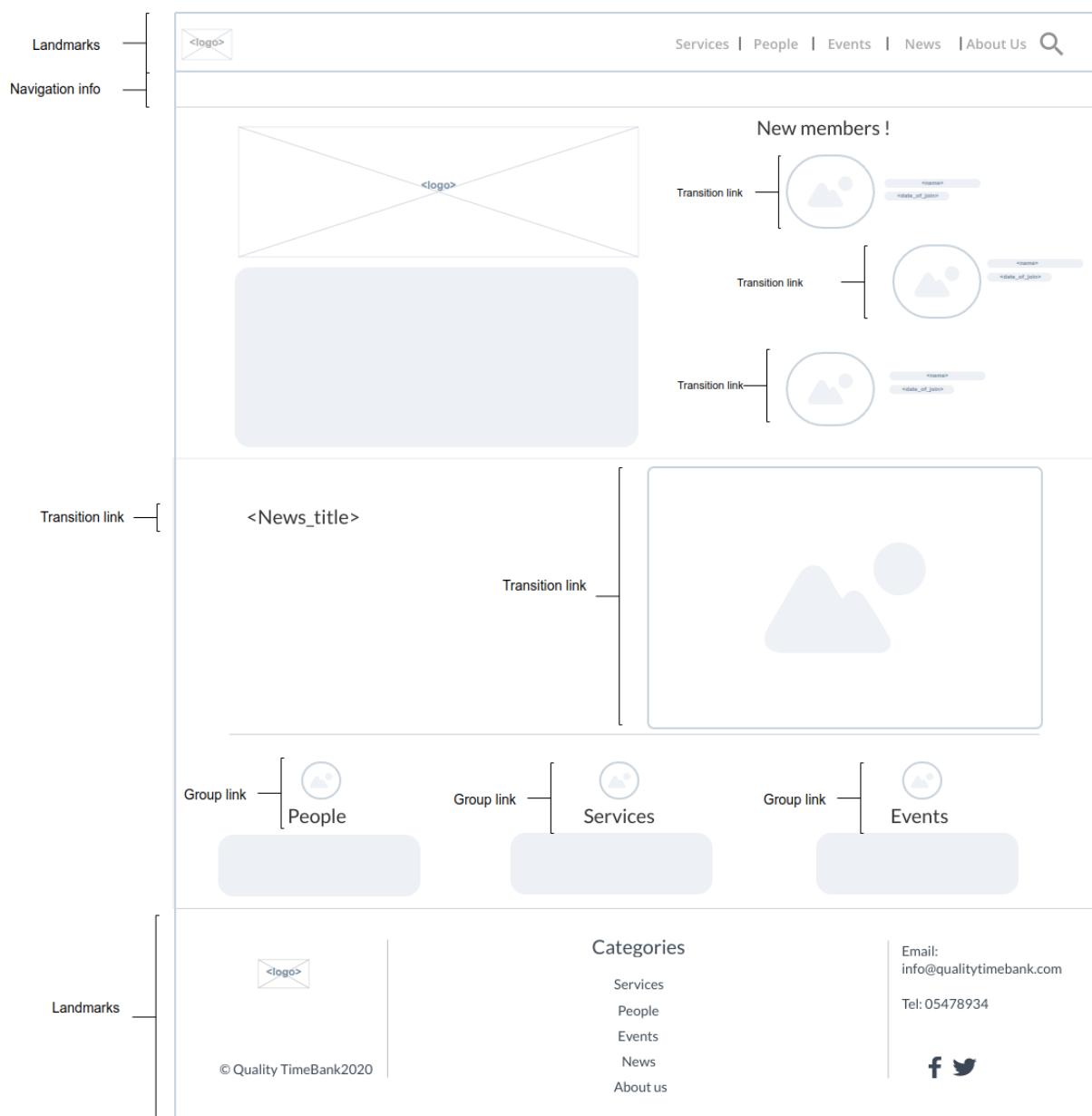


Figure 4.1: Wireframe

**quality time bank**

People Services Events News About us **Q**

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."

Transition link

Government backs QTB to deliver language project

More

Group link

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 new members and services, or just to have fun together.

Categories

People Services Events News About Us

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

Landmarks

Figure 4.2: Mockup

## 4.2 Topic: Association

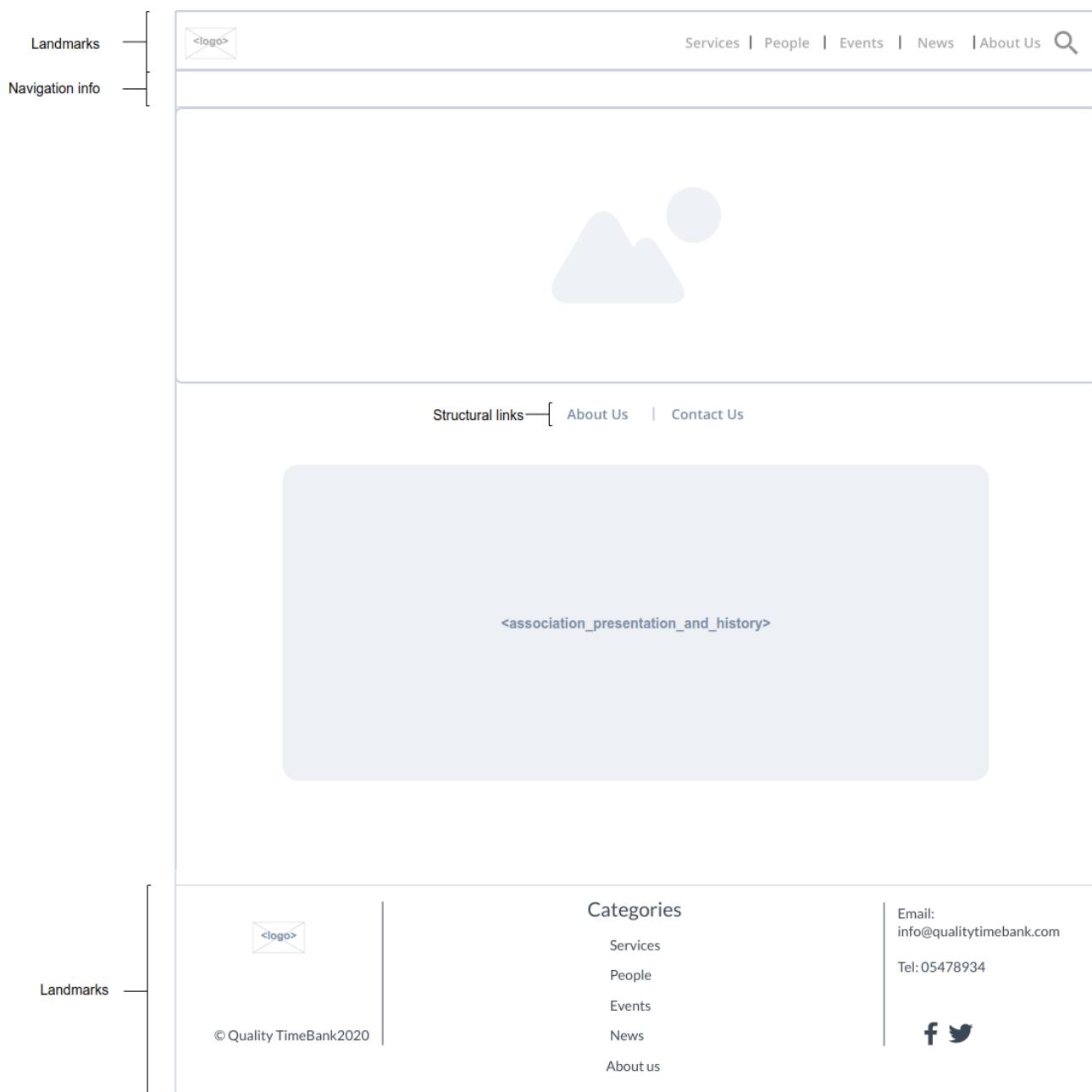


Figure 4.3: Wireframe

**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**

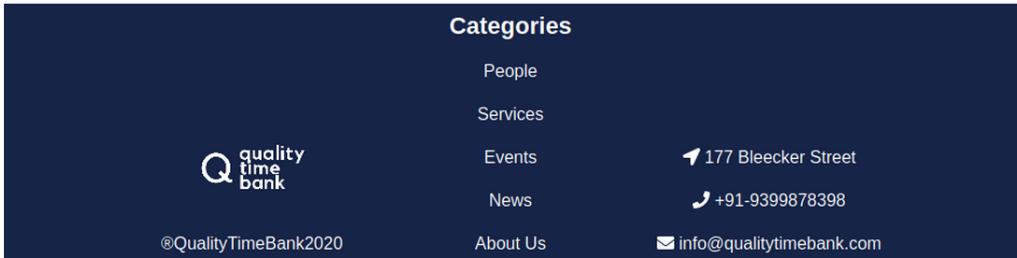


Figure 4.4: Mockup

## 4.3 Kind of Topic: Person

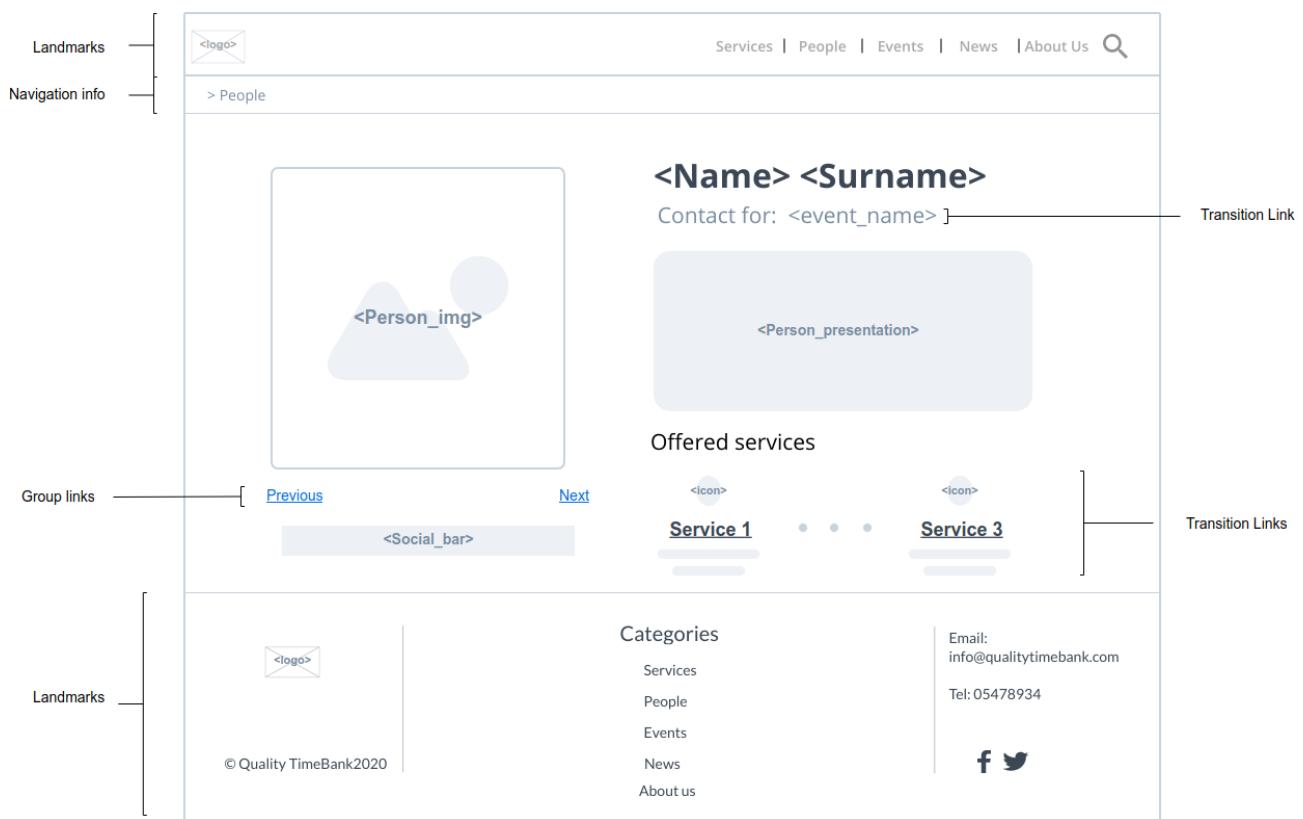


Figure 4.5: Wireframe

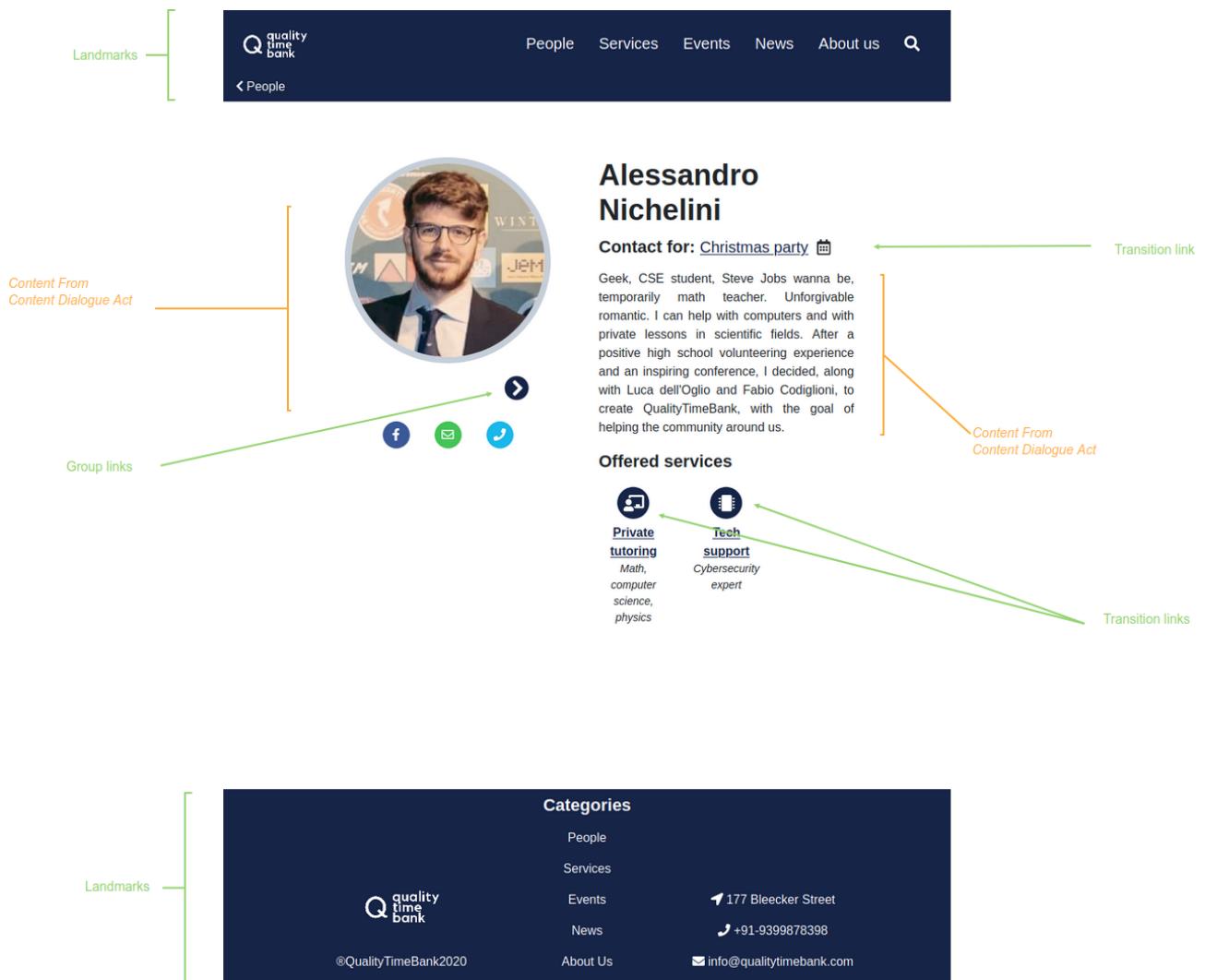


Figure 4.6: Mockup

## 4.4 Kind of Topic: Service

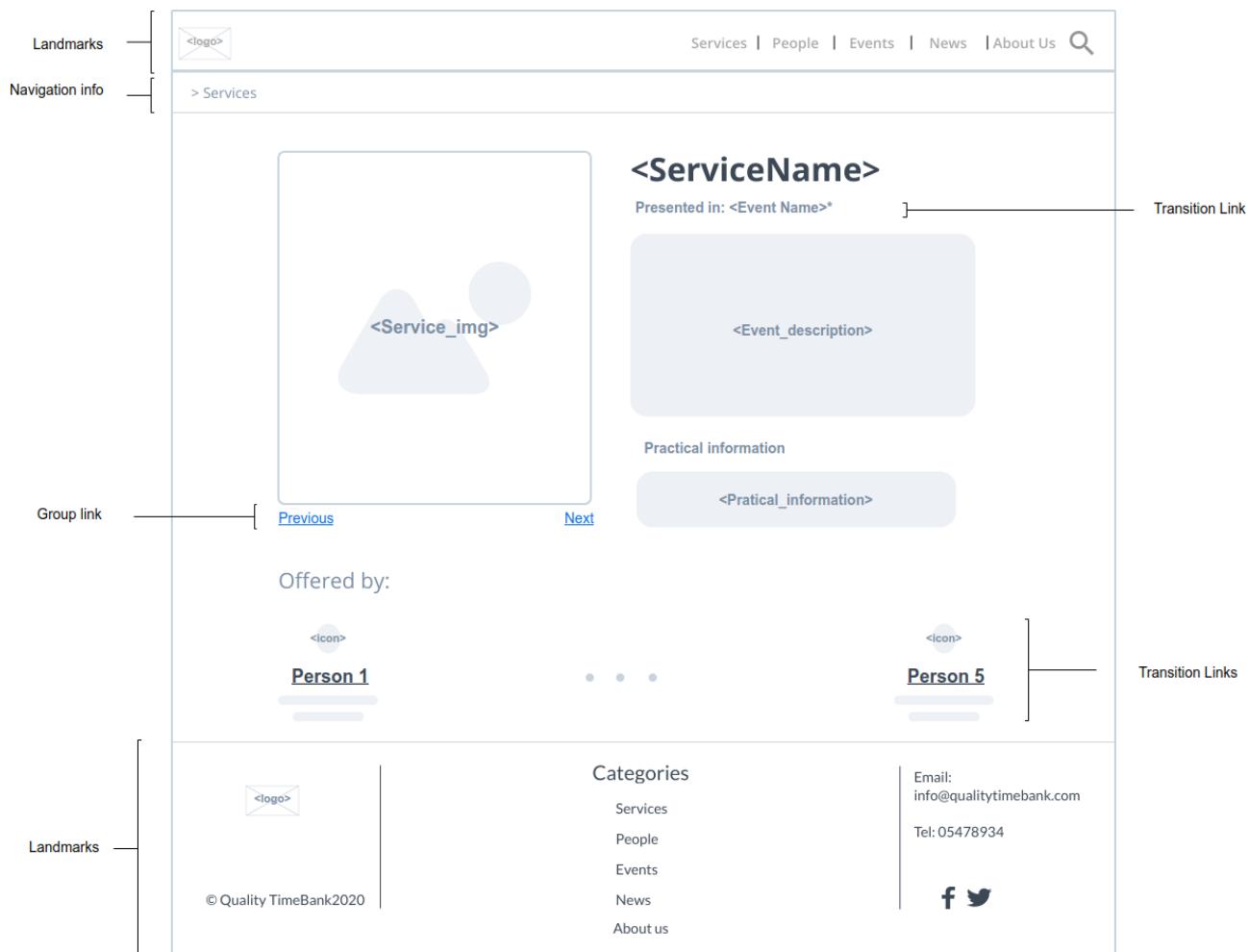


Figure 4.7: Wireframe

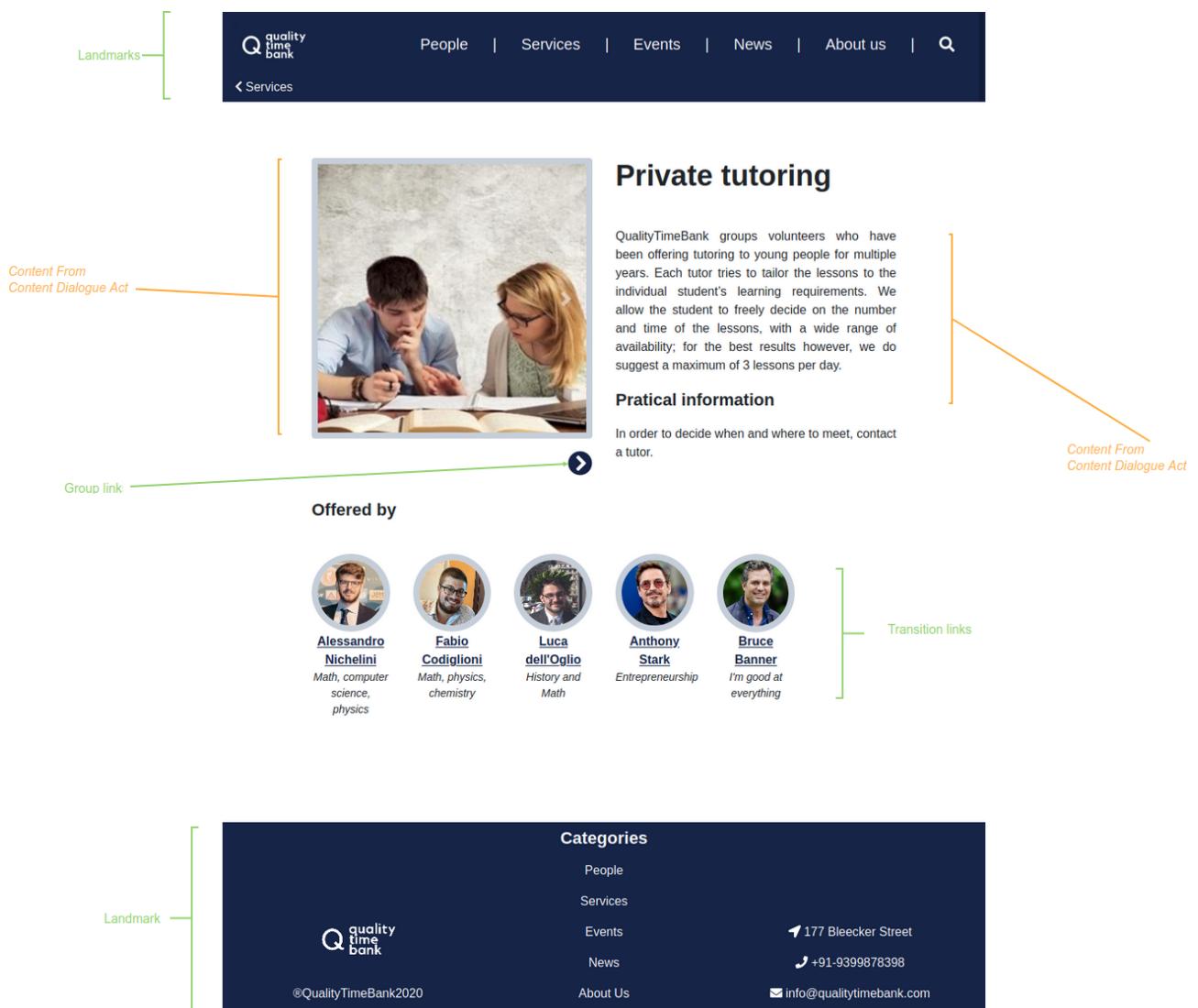


Figure 4.8: Mockup

## 4.5 Kind of Topic: Event

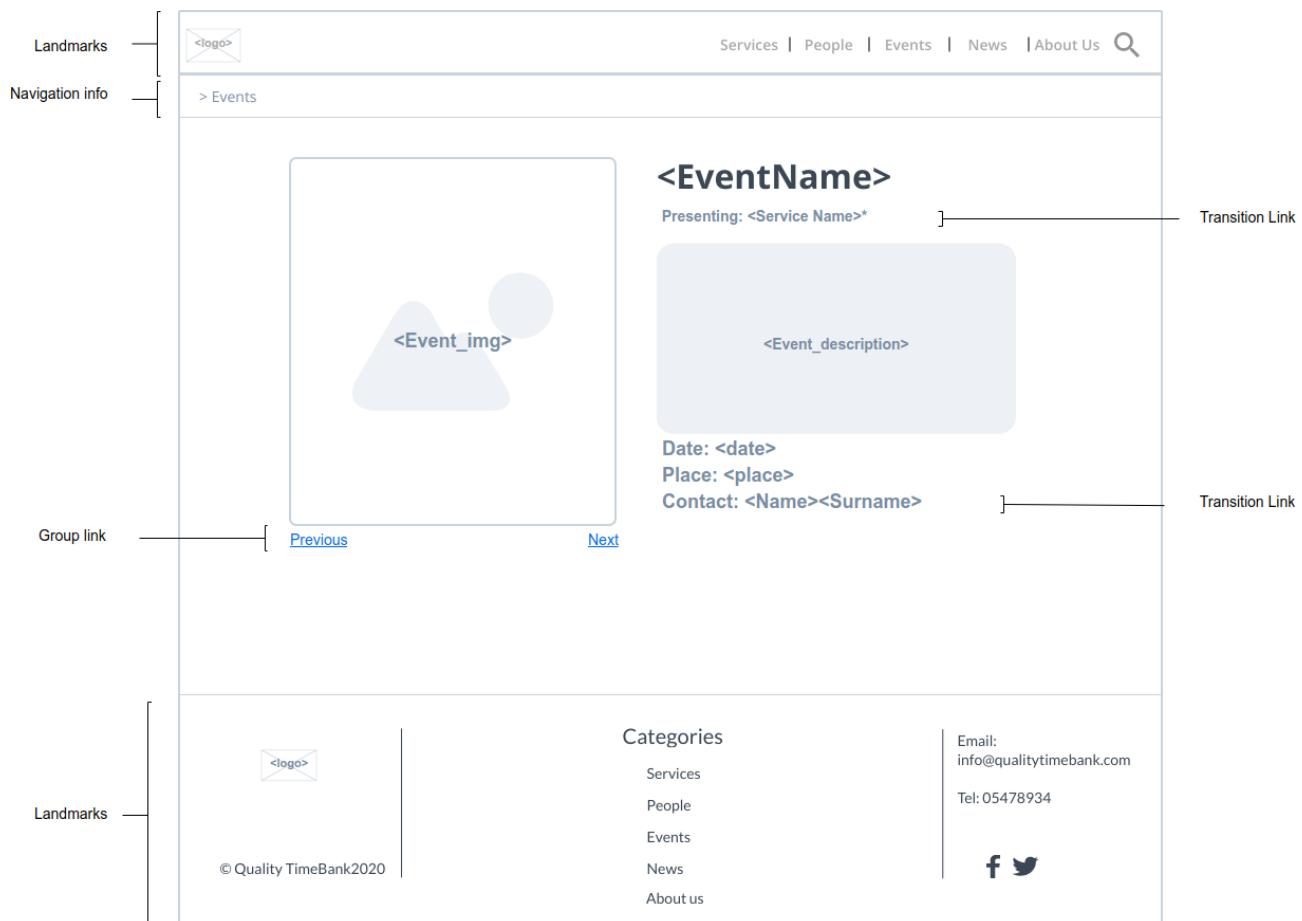


Figure 4.9: Wireframe

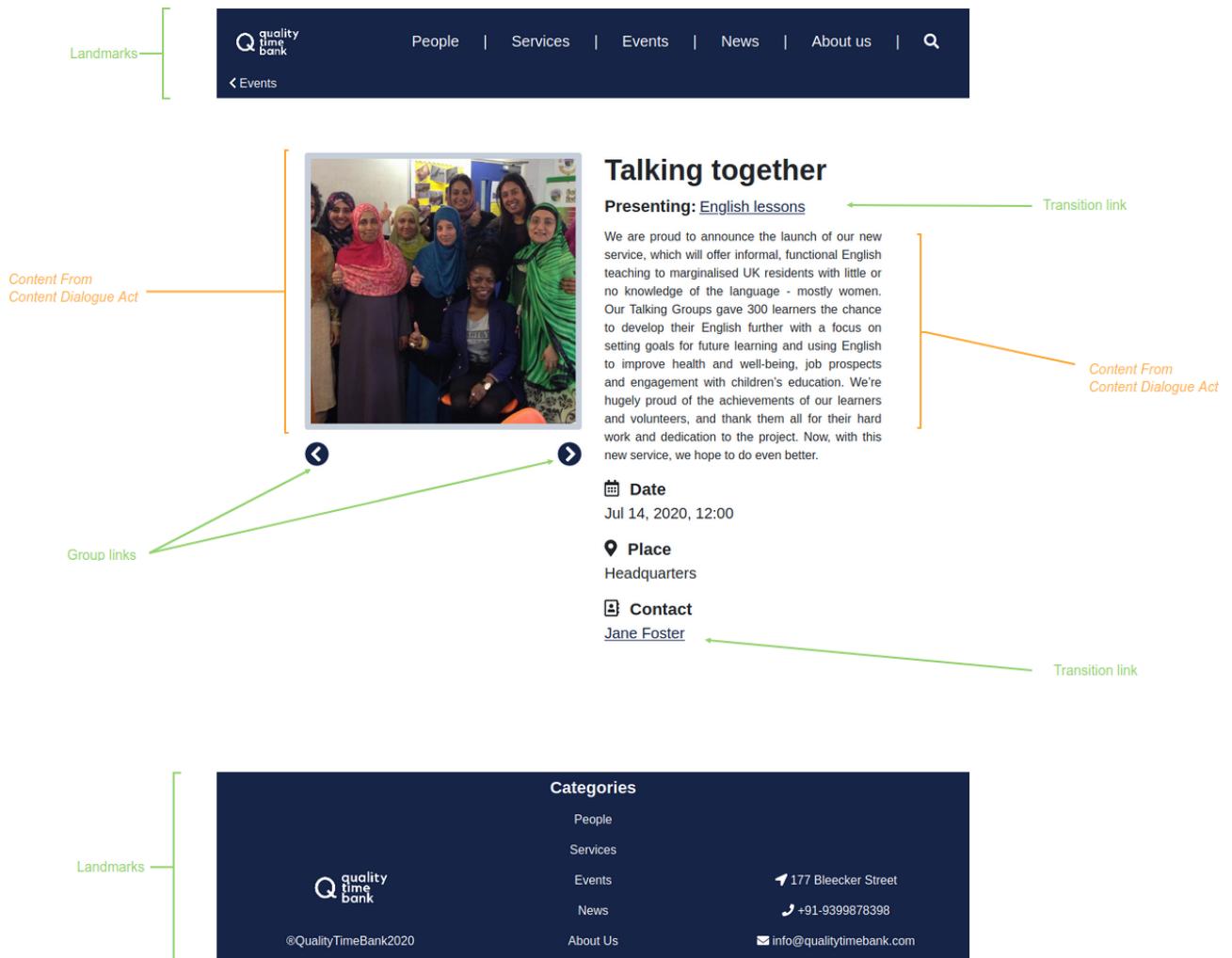


Figure 4.10: Mockup

## 4.6 Introductory page: People

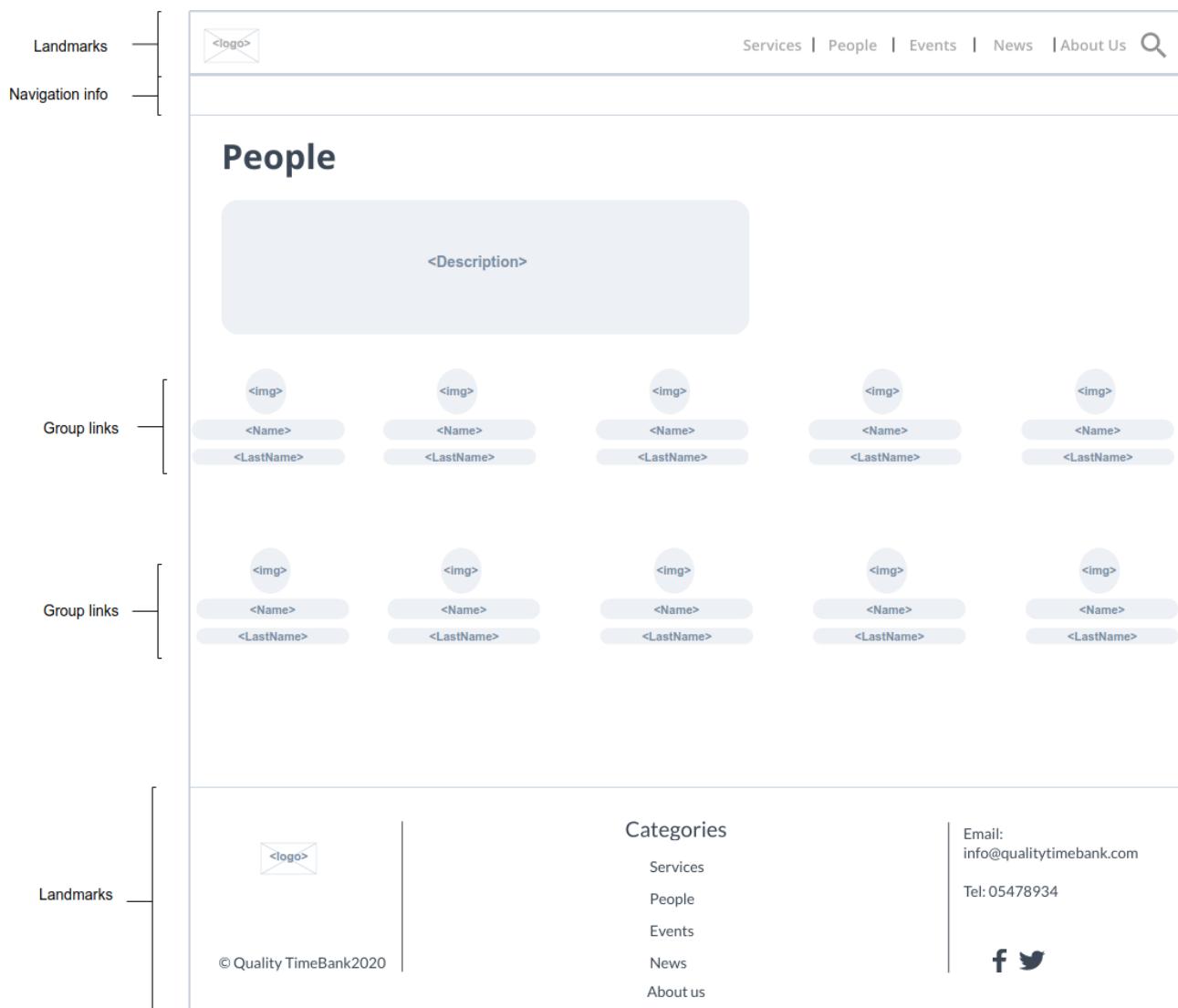


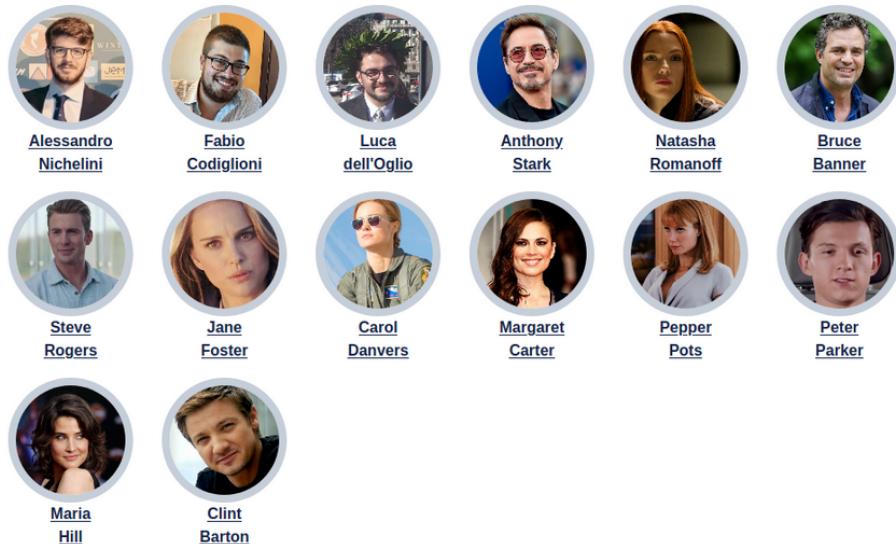
Figure 4.11: Wireframe



## 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.

*Content From  
Introductory Dialogue Act*



Group links

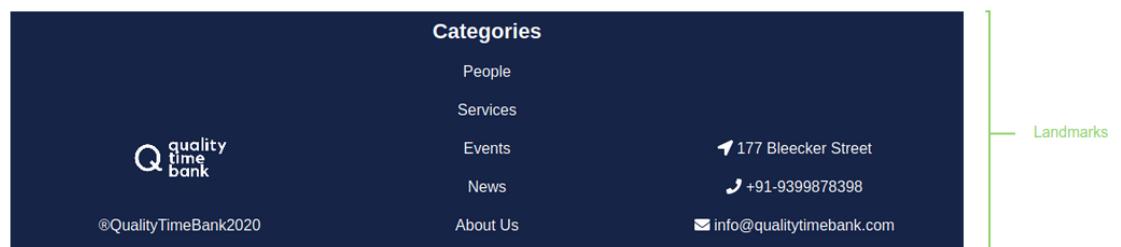


Figure 4.12: Mockup

## 4.7 Introductory page: Services

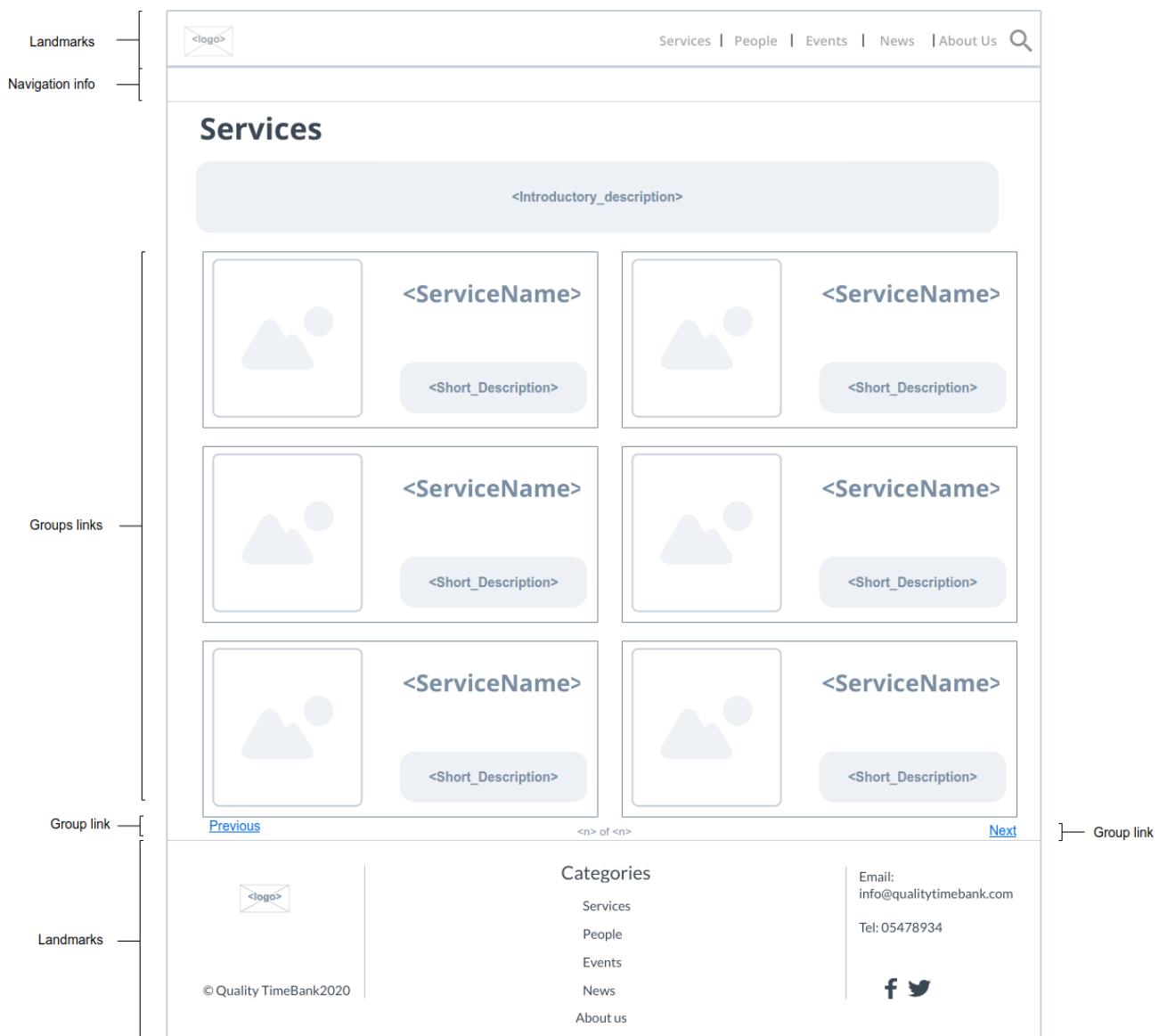


Figure 4.13: Wireframe

Landmarks [ ]


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

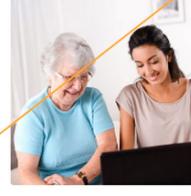
## Services

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**  
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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 

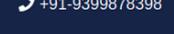
©QualityTimeBank2020  177 Bleecker Street  
 +91-9399878398  
 info@qualitytimebank.com

Figure 4.14: Mockup

## 4.8 Introductory page: Events

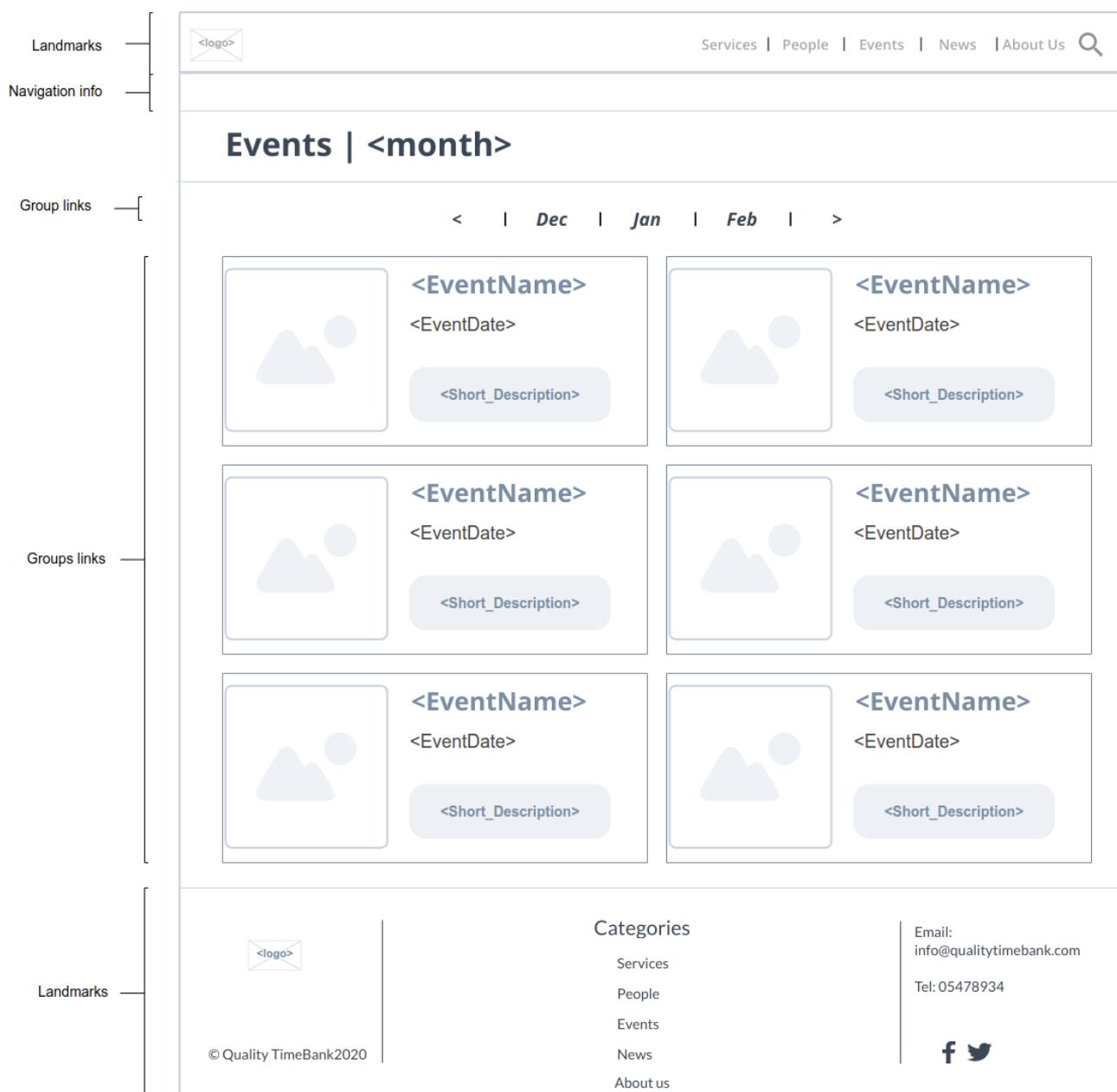


Figure 4.15: Wireframe

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**

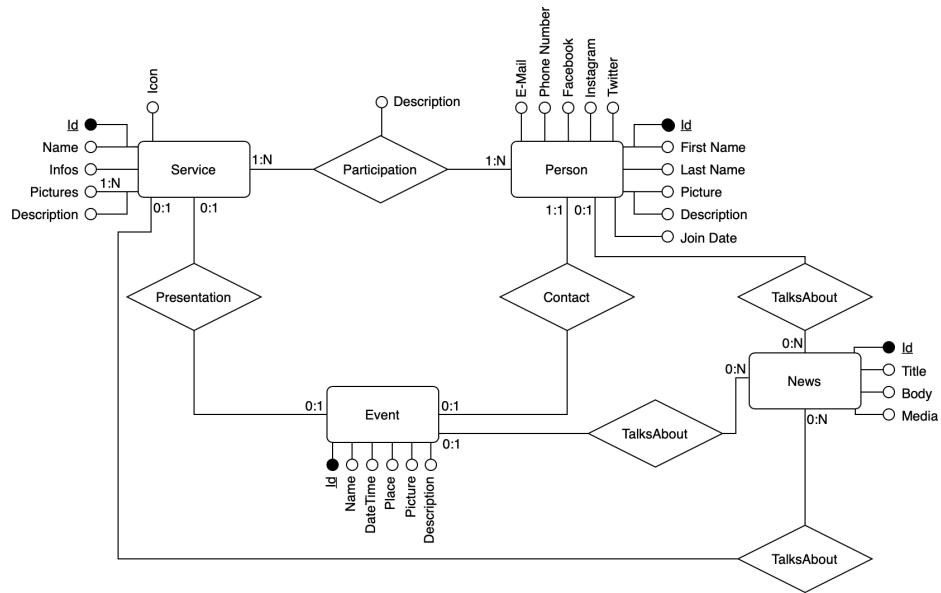
The footer section features the Quality Time Bank logo, copyright information ("©QualityTimeBank2020"), and contact details: "177 Bleecker Street", "+91-9399878398", and "info@qualitytimebank.com".

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

