

Mobile Application Development

Vacation Planner

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1. Introduction

Vacation planner is a mobile application for planning the trips which will help users to always be up to date with trip bookings and have all important details at one place. This application has functionality to note the already booked trip and schedule each day or event separately of a particular trip. Users can plan a trip and plan every day or event of that whole trip. Users can search for the trip or can sort the trips according to the start date. Users can also create a packing list and mark every item when it is added into the bag, so that they will forget nothing.

This application is used before going to the trip to add various bookings and during the trip keep yourself up to date with the plan. There is also an option to give the budget for the whole trip and also add expenses of the trip so that users can analyze their financials for the trip.

2. User

Vacation Planning application can be used by any person who is planning a trip and wants to keep track of all the details on a daily basis. Such as tourists travelling to different cities or countries, they can use this application to plan each and every day of their trip.

3. Setup

This application is built in Visual Studio using xamarin forms which is Nativ for all mobile platforms. All the trips and events along with their details are saved in a table format in the SQLite Database and displayed as a list format. Bindings are used between Xamarin Forms, C# and database. The content page is used to display the list of trips, add new trips and packing items, the tapped page is used to display the details of the trip and also to add a new event.

4. Wireframes

Following are the wireframes According to which the actual system is designed.

List of all trips will be displayed on the Screen 1 in the list format where users will need to click on the list item to open details. There will also be an option to search the trips and to sort the trips on Screen 1. On the same screen users will have an option to add a new trip which will navigate users to the Screen 2 and there user will add required details and save the trip. Users can navigate to the maps from the Globe icon from Navigation Bar.

The image shows two hand-drawn wireframes on a grid background.
Screen 1: All Trips (left): The header has 'All Trips' and a globe icon. Below is a search bar labeled 'Enter Text To Filter' and a 'Trips' label. The list contains two items: 'New Year Trip' with date 'Dec 30, 2019' and 'Trip To Prague' with date 'Feb 23, 2020'. At the bottom right is a plus icon in a circle.
Screen 2: Add New Trip (right): The header has 'New Trip' and a globe icon. Below is a question 'Where Should We Take You?'. The form has fields for 'Trip Name:', 'Start Location', 'Places', 'Start Date', 'Days', 'Details', and 'Budget'. At the bottom is a 'SAVE' button.

Screen 1: All Trips

Screen 2: Add New Trip

After choosing the trip item from the list, users will get navigated to Screen 3 where there will be a list of all the events from the selected trip. Here users will be able to click on the add button and plan their trip day by day or event by event and list their details. In the navigation bar there will be an option to anytime navigate to maps and also to add the packing list for the trip. In the packing list from Screen 4, users will be able to add the things that they should pack for the trip and add the quantity or any details and mark them to check if they have already added them into the bag.

← All Details | 🔍 | ☰

My Plan | My Day | Trip Details

Enter Text to Filter

First Day

Second Day

+

Screen 3: All Details

← Packing Items | 🔍 | ☰

Enter Text to Filter

Enter Name | Quantity | Add

☐ Cap | 1

☐ Jacket | 3

Screen 4: Packing List

When clicked on the add event button, users will be navigated to screen 5 and screen 5.1 where they will be able to create a new event and add details according to if it is traveling or stay. Users can anytime navigate to the internet to search for the travel or stay if they haven't done it before.

Add Details

Travel Stay

Event Name

Start Date

Departure Time

Departure From

Arrival Time

Arrival At

Cancel Add Stay Other Just Save

Screen 5: Add Travel Details

Add Details

Travel Stay

Stay At

Check In

Check Out

Total Price

Airbnb Other

SAVE

Screen 5.1: Add Stay Details

On the Screen 3, on different tabs users will be able to see the details of their selected event and trip. Users will be able to edit or delete the events and trips from Screen 3.1 and Screen 3.2 respectively if they choose to. Also they will be able to navigate to the maps and their packing items for the trip.

← All Details		🔍	🗑️
My Plan	My Day	Trip Details	
Travel Details:		📋	
Start Date:			
Departure Time:	Departure from:		
Arrival Time:	Arrival from:		
Travel By:			
Total Price:			
Stay Details:			
Stay At:			
Check In:	Check out:		
Total Price:			

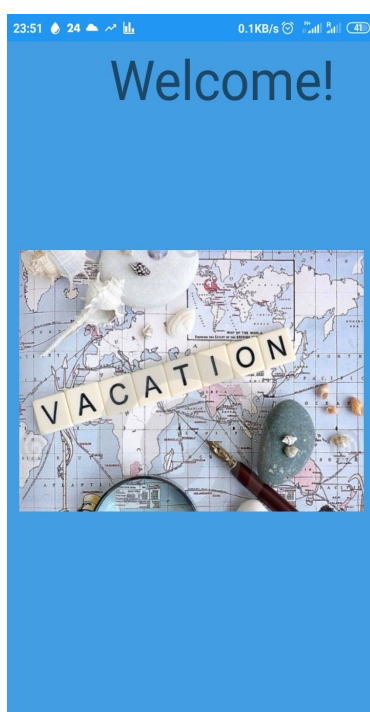
Screen 3.1: My Day

Screen 3.2: Trip Details

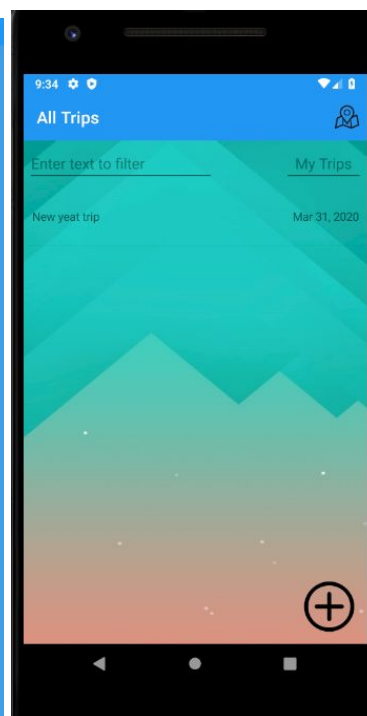
5. Screenshots

With the reference of wireframes, following are the screenshots from the developed application.

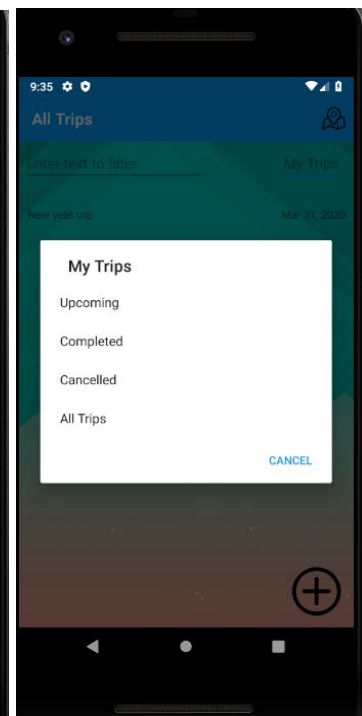
There is a Screen 1 as a splash screen, whenever users open an application at first this screen is displayed. After a few seconds users navigate to screen 2 which is a content page where they have a list of trips which can be sorted according to the upcoming, previous cancelled or all. Users also have a search bar option to search for the trip from the search box. There is an option to navigate to maps from the navigation bar and at the bottom there is an add button which navigates users to Screen 2.



Screen 1: Splash Screen

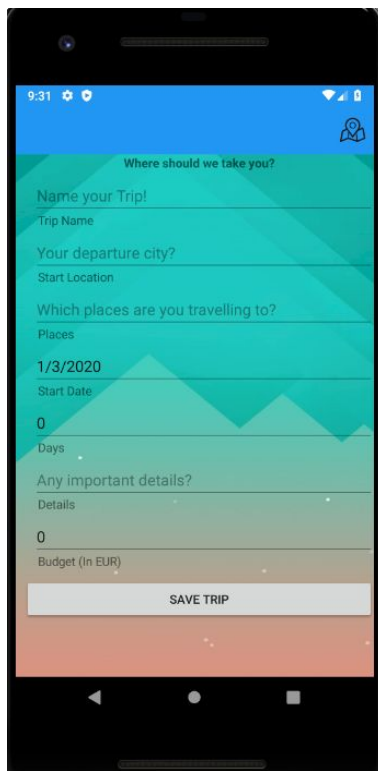


Screen 1: All Trips



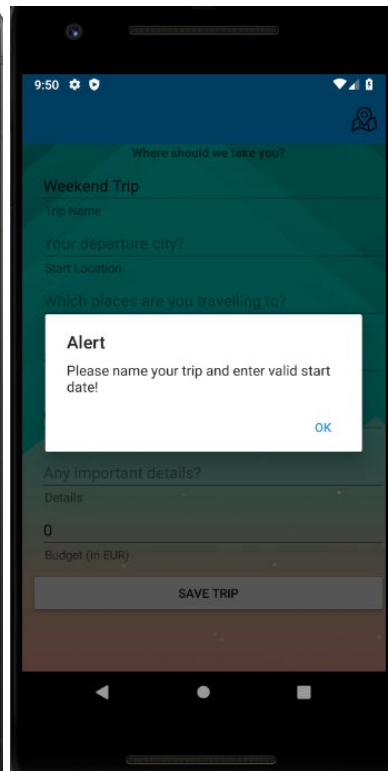
Screen 1.1: Sorting

Screen 2 is the content page for adding the new trip and it will allow users to save the trip only if it has a name and the trip is still in future. After saving the trip users return to the Screen 1 where the list of all trips is available.



This screenshot shows the 'Add New Trip' screen. It features a blue header with the title 'Where should we take you?' and a user profile icon. The form includes several input fields: 'Name your Trip!' (with a sub-label 'Trip Name'), 'Your departure city?' (with a sub-label 'Start Location'), 'Which places are you travelling to?' (with a sub-label 'Places'), '1/3/2020' (with a sub-label 'Start Date'), '0' (with a sub-label 'Days'), 'Any important details?' (with a sub-label 'Details'), and '0' (with a sub-label 'Budget (In EUR)'). A 'SAVE TRIP' button is located at the bottom of the form.

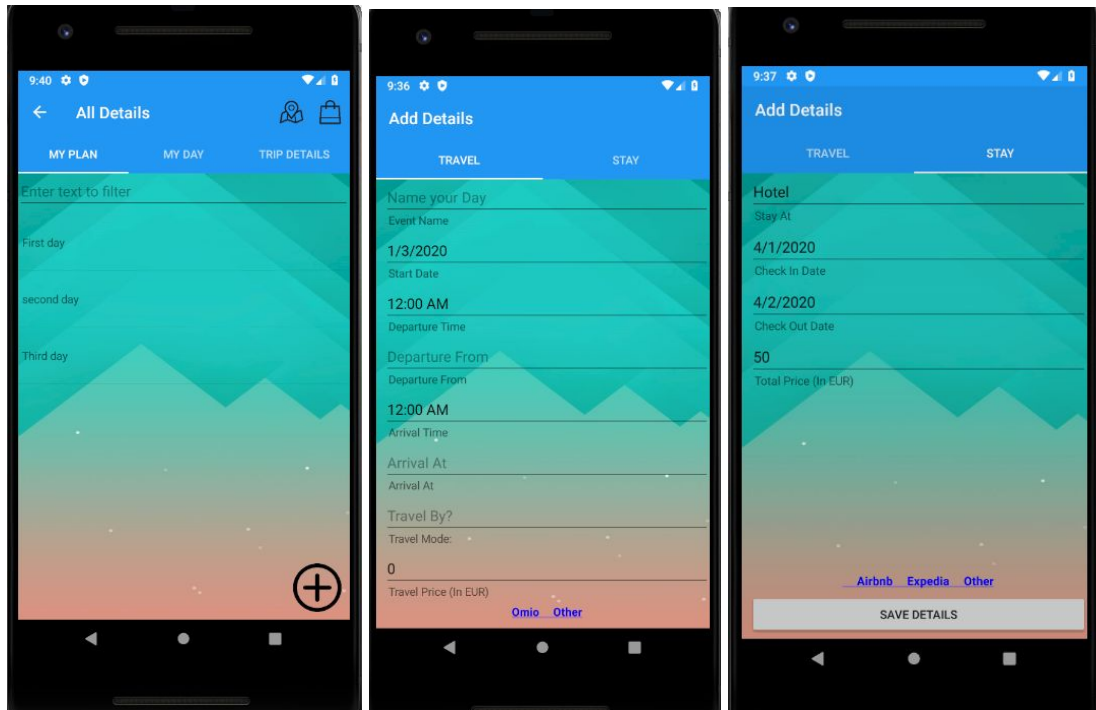
Screen 2: Add New Trip



This screenshot shows the same 'Add New Trip' screen as before, but with an 'Alert' dialog box overlaid. The dialog box contains the text 'Alert' and 'Please name your trip and enter valid start date!'. An 'OK' button is visible in the bottom right corner of the dialog box.

Screen 2.1: Alert

After selecting the trip, the details of that trip opens and here there is a list of the events of that trip, an add button to add the new event and give the details if it is only travel or stay on Screen 4 and Screen 4.1 as a tabbed page. Users have the option anytime to navigate to the internet to search and book for a particular travel or stay if they haven't before. Also there is an option to open a packing list and maps from the navigation bar. There is also a search bar to search for a particular event.

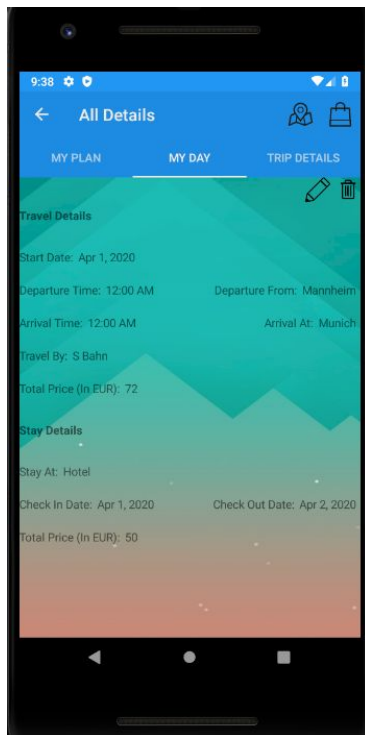


Screen 3: All Details

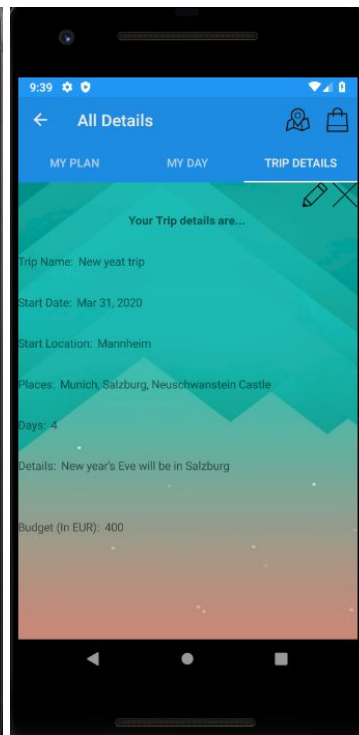
Screen 4: Add Travel Details

Screen 4.1: Add Stay Details

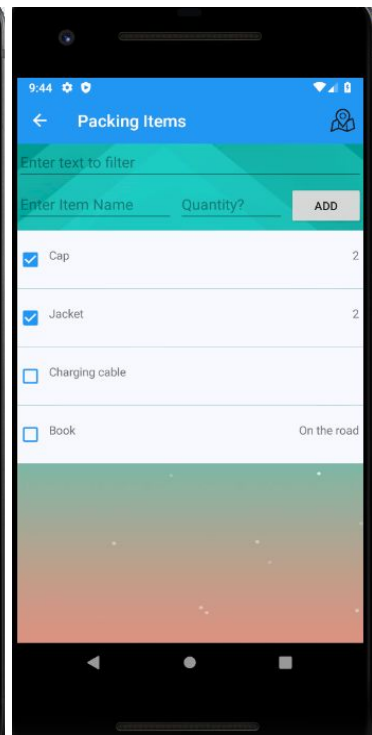
The Screen 3 is a tabbed page, so after clicking on any event, users get navigated to view the details of that event which is the second tab and the Screen 3.1 named as My Day. That page has all the details that the user has given and also there is an option to edit or delete the event. Same as the event, on the third tab and the Screen 3.2, there are details of the trip and also an option to edit the trip details or cancel the entire trip. On the Screen 5 users have an option to add the packing items into the list and before leaving for a trip they can check if all the items are already in the bag or not.



Screen 3.1: My Day



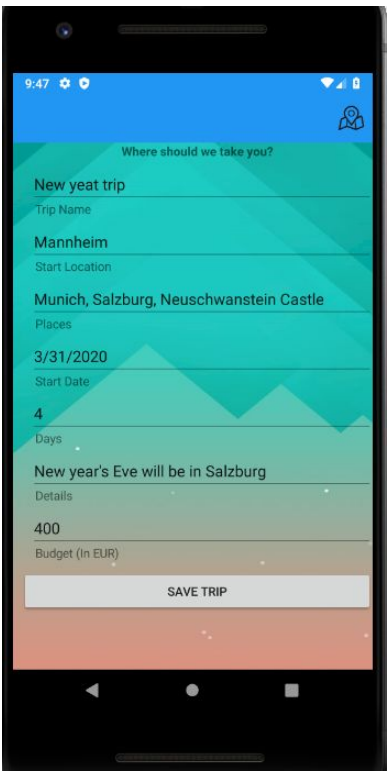
Screen 3.2: Trip Details



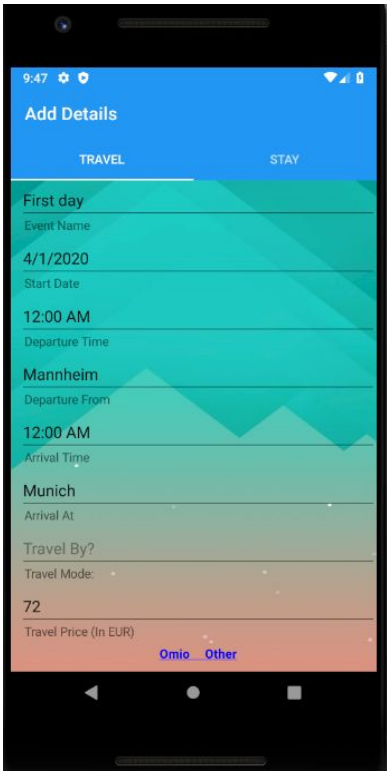
Screen 5: Packing

Items

When clicking on edit trips or edit events users have the option to edit the details and save them.

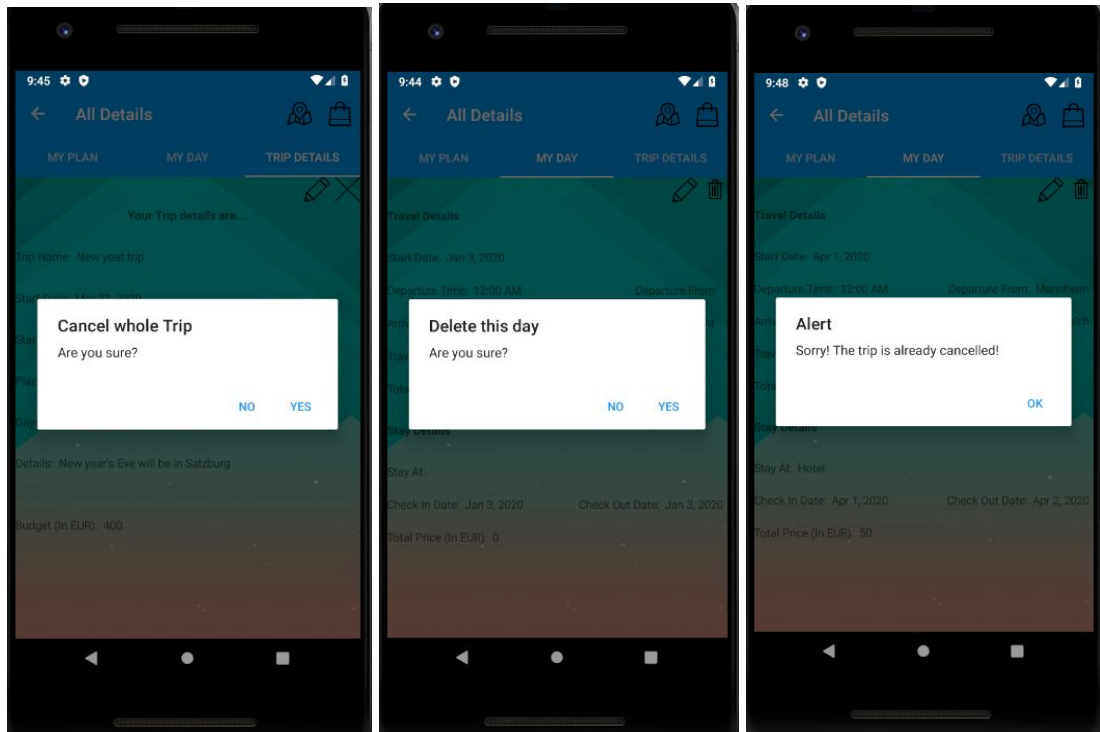


Screen 2.1: Edit Trip



Screen 4.2: Edit Event

When a user clicks on the delete event or cancel trip, they get notifications as Screen 3.3 and 3.4 if they really want to delete or cancel. If said no, they return on the page of the list of events and if they say yes, the trip gets cancelled and users have the option to access that from all trips page or event gets deleted. If users try to edit any cancelled trip they get notification saying that the cancelled trips cannot be edited.



Screen 3.3: Alert: Cancel Trip Screen 3.4: Alert: Delete Event Screen 3.5: Alert

6. Future Scope

As there are always some updates remaining in any application, this application also has many future developments remaining.

1. Total expenses: Users should see the total expenses of the trip so that they will be able to compare that with the budget they had set.
2. Weather Forecast: It would be great if users can see the weather of the place they are travelling to inside this application so that they can adjust their packing list accordingly.
3. Notification: Users should get notification if they want to.
4. Sharing: There should be an option to share the details of a trip or event with their friends or family.
5. Attachments: It would also be very nice if there is an option to add attachments. They can be anything like travel tickets or photos of the trip as a memory.

Within a few days the current version of the application will be deployed on the Google Play Store and Windows Store for people to use.

7. Conclusion

This application is one of the important applications for tourists and also for the people who are travelling for business purposes to plan the trip so that they will utilize most of their time.