

Contents

1. **Stakeholders**
2. **Introduction**
3. **Problem domain**
4. **Soulution domain**
5. **Functional requirements**
6. **Non Function requirements**
7. **Tracecability matrix**
8. **Test Cases**
9. **Uses cases**
10. **Measurability**
11. **Finish**

Stakeholders

All stakeholders involved in this project are participants involved in the design, development, implementation and use of the TurntApp application. These stakeholders are responsible for the successful design and implementation of TurntApp.

Stakeholders include:

12. Users of the system
13. Operators of the system
14. Acquires of the system
15. Owner's of the system

16. Suppliers of the system
17. Developers of the system
18. Builders of the system
19. Maintainers of the system

Stakeholder name	Role	Description
Jackson Dyora	Programmer	Software Developer
Lesego Seitshiro	Programmer	Software Developer
Thabiso Leeuw	Programmer	Software Developer
Khutso Mpaketsane	Scrum Master	Coordinates Project
Andries Bingani	Project Manager	Managers Project
Dr Terrence van Zyl	Project Manager	Managers Project
End users	User of application	User of the application

Introduction

Problem Domain

The TurntApp mobile application is a marketing platform which allows perspective socialites to view or advertise upcoming social events without having to inquire through social media for events or through advertising agencies to promote their events. This application is intended for both event promoters and socialites with the primary objective of accessing events and marketing events on a functional mobile application. TurntApp addresses issues faced by socialites and event promoters where wasted time and resources are used to find a suitable party or event and wasted resources on marketing events to disinterested target groups.

Perspective socialites face issues of selecting varying social events of different categories which may include:

- 20. Parties or clubbing
- 21. Concerts or music festivals
- 22. Conferences or exhibitions
- 23. Conventions or company launches

Socialites can select events according to their preferences or by following their favorite DJs or celebrities.

Event organisers face a variety issues which include:

- 24. Marketing their events
- 25. Targeting a specified group of a market
- 26. Statistics for event management

SOLUTION DOMAIN

The TurntApp mobile application servers a dual purpose for both socialites and event organisers and should have functionalities for both the users.

The proliferation of smart mobile devices like; mobile phones, tablets, laptops and phablets have made the use of mobile applications a daily necessity. TurntApp will be accessible for all mobile devices that operate on the Android operating system.

TurntApp will cater for different users like:

- 27. Socialites who are looking for events to attend.
- 28. Event organisers who are looking to plan or host events in their establishments.
- 29. Events promoters who will be marketing events.

REQUIREMENTS SPECIFICATION

30. Requirements for socialites

- 1. Users should be able to register themselves and create an account that is unique to them.

2. Users should be able to search events according to their preferences.
3. User should be able to post events of their events.
4. Users should be able to invite their friends or other users to come to events.
5. Users should be able to locate events on Google maps and get directions to the destinations.
6. Users should have a calendar of their upcoming events.
7. Users should be able to follow and be followed by other users.
8. Users should be able to view current events.

31. Requirements for event organisers

9. Organisers should be able to register their organisation or establishment that is unique to that entity.
10. Organisers should be able to give a description of their organisation or establishment.
11. Organisers should be able to create events

II. Requirements for event promoter

12. Promoters should be able to advertise events

The objective of this project is to solve the variety of issues users face which include; searching for events according to their interest and preferences, invite their friends or colleagues to events and locating the events.

Event promoters or organisers will be able to channel their marketing to a specific target group and not waste resources on disinterested users.

FUNCTIONAL REQUIREMENTS

TurntApp is a marketing platform which specifically utilises a mobile application to access audiences who use smart mobile devices. The application caters for two entities: for event promoters and socialites and should therefore be functional for both parties.

Functionality for users:

- 32. Users should be able to register and create a personal account which is only accessible to them. This requires a personal login name or email address and a password to access their account.(US001)
- 33. Users should be able to log onto their account. This requires a user to provide a user name and password to confirm that they are the user of the account.(US002)
- 34. Users should be able to create and personalise their accounts. This will require the user to provide a list of their preferences and interest. (US003)
- 35. Users should be able to befriend or follow other socialites or celebrities. This functionality allows users to view events of their favorite celebrities, DJs, socialites or friends. (US004)
- 36. User should have the option of being followed privately, by friends or colleagues, or followed publicly by any other user. The option of being a private or public user allows the user to have control over who can view their profile and follow them.(US005)
- 37. Users should be able to invite their friends or colleagues to attend events they will be attending.(US006)
- 38. Users should be able to search according to the event's geographic location, this requires users to provide location coordinates or provide their current location to locate events in their proximity. Users should also search events according to event names. (US007)
- 39. Users should be able to confirm their attendance to an event which will then be uploaded onto their personal calendar and their upcoming events.(US008)
- 40. Users should be able to retrieve Google map location of events they will be attending.(US009)
- 41. Users should be able to create an event. This requires users to provide the following details of the event:

13. Event name

- 14. Event geographic location on Google maps
- 15. Entertainment lineup: DJs, celebrities or dignitaries
- 16. Admission prices for general access and VIP access
- 17. Date and time of event
- 18. Poster

Functionality for event promoters and organisers:

- 42. Event promoters should be able to register and create a brand or company account which is only accessible to that enterprise. This requires a brand or company username and a secure password to prevents security attacks.(PR001)
- 43. Event promoters and organisers should be able to provide a detailed description of their enterprise or establishment.(PR002)
- 44. Event promoters should be able to view event statistics. Statistics will include: the number of people attend the event, the number of people who are interested in the event but have not confirmed their attendance and people who have viewed their event but will not be attending.(PR003)
- 45. Event organisers should be able to create a guest list of dignitaries, celebrities or DJs that will be attending their event.(PR004)
- 46. Event promoters and organisers should also be able to create and market their own events. This requires users to provide the following details of the event:
 - 19. Event name
 - 20. Event geographic location on Google maps
 - 21. Entertainment lineup: DJs, celebrities or dignitaries
 - 22. Admission prices for general access and VIP access
 - 23. Date and time of event
 - 24. Poster

NON-FUNCTIONAL REQUIREMENTS

Usability

TurntApp is a dual purpose application which needs to have functionality for both users and promoters and should be able to switch between both.

Users can view events and event promoters can advertise events. Users are only required to provide log in details and the simple interface where users will scroll through and click on options will make the application easy to use.

Reliability

The use of personal accounts and enterprise accounts allows the application user to have a unique profile which is accessible through a secure password. Security for company promoters is essential to avoid cyber hackers from creating fake events and also to preserve the company's reputation.

Adverts will be authenticated by event promoters or companies to avoid users creating or attending non-existent events.

Supportability

The application is only available to smart devices that operate on an android operating system. TurntApp was developed with SDK 23 (Software Development Kit) and therefore the application's full functionalities will be supported by mobile devices with the SDK 23.

Privacy

TurntApp will provide the functionality of users being able to follow other users and view other user's profiles. This creates potential privacy and security issues where users can "stalk" other users or follow their movements. Users have the option of making their profile private or public; this will address the issue of privacy and security.

Use Cases

Requirements:

REQ 1: Register
REQ 2: Login users
REQ 3: Create/personalise account
REQ 4: Create events
REQ 5: View events
REQ 6: Search events
REQ 7: Retrieve directions to event
REQ 8: Invite friends to events
REQ 9: Confirm events attendance
REQ 10: Events added to the calendar
REQ 11: View event attendance
REQ 12: Follow users

Actors:

Socialites (users)
Organisers
Promoters
Mobile device

Use case:

UC 1: Register
UC 2: Login
UC 3: Create preferences
UC 4: Description of establishment
UC 5: Create events
UC 6: Search events

UC 7: Confirm attendance

UC 8: View upcoming events

UC 9: View ongoing events

UC 10: Retrieve directions

UC 11: View user event attendance

UC 12: Follow user/ View followers

Traceability

	USE CASES							
	UC 5	UC 6	UC 7	UC 8	UC 9	UC 10	UC 11	UC 12
TC 1		X						
TC 2	X							
TC 3	X					X		
TC 4					X			
TC 5								X

Test Cases

TEST CASE 1: Search events

Test Case Identifier: TC 1

Use Case Tested: UC 6, Search Event

Pass/Fail Criteria: The test passes when the users enters an event with a key word or substrings corresponding to an existing event that's in the database

Input Data: Input string of words that correspond to the event name

Test Procedure:

47. Type in the correct substrings or key word that corresponds to an existing event.
48. Type in an invalid key word or substring of an event that does not exist in the database

Expected Result:

49. An existing event from the database will be retrieved and displayed onto the screen
50. A search through the entire database will be performed that will be unsuccessful, this will then display a disclaimer that the event was not found

TEST CASE 2: Create event

Test Case Identifier: TC 2

Use Case Tested: UC 5, Create Event

Pass/Fail Criteria: The test passes when the users creates an event with the form creation form which will then be added onto the database

Input Data: The users will input the event details on the form for creating an event

Test Procedure:

51. Type in the correct details for the event. This will require the user to provide numerical data and string inputs into the relevant categories of the event creation form. The form requires the following compulsory requirements: the event name, event geographic location, entertainment lineup, admission prices for general access and VIP access and the time and date of the event. The event poster is not a

compulsory requirement.

52. Type in an incomplete form that has omitted some or all of the compulsory requirements.

Expected Result:

53. When the required details of an event are provided, the event form will then be uploaded onto the database. The event will appear on the database and upcoming events page.
54. The user will be warned to provide the compulsory requirements and complete the form before it is uploaded onto the database

TEST CASE 3: Retrieve event directions

Test Case Identifier: TC 3

Use Case Tested: UC 10, Retrieve directions, UC 5, Create events

Pass/Fail Criteria: The test passes when the user is able to view retrieve the direction of an event via Google maps

Input Data: Non required

Test Procedure:

55. Users should search an event that they want to attend; they should then select the event and click on the directions option.

Expected Result:

56. The Google maps application will be launched which will provide the directions to the location of the event, this will indicate the success of the test
57. The test fails when there are directions to an event on the database but the locates the incorrect location of an event, this indicates the users has provided the incorrect directions to an event

TEST CASE 4: Ongoing events

Test Case Identifier: TC 4

Use Case Tested: UC 9, View ongoing events

Pass/Fail Criteria: The test passes when the user navigates to the ongoing events page which will retrieve the ongoing events from the database and display the events on the ongoing events page

Input Data: Non required

Test Procedure:

58. User should be logged onto TurntApp and navigate to the ongoing events tab where they will be able to view ongoing events

Expected Result:

59. Once the user has navigated to the ongoing events tab, a list of all the events will be retrieved from the database and displayed on the screen. The display of the events that are currently happening will indicate the success of the test.
60. The test will fail when there are ongoing events on the database but are not displayed on the ongoing events page

TEST CASE 5: View number of followers

Test Case Identifier: TC 5

Use Case Tested: UC 12, View followers

Pass/Fail Criteria: The test passes when the users is able to view their number of followers and the users following them

Input Data: Non required

Test Procedure:

61. User should be logged onto TurntApp and nevigat to their profile where they will be able to view the number of followers they have

62. Users should then select the followers tab which would then display the list of their followrs

Expected Result:

63. The number of users will be displayed on the follwers tab. If the number of users on display corresponds to the number of users on the database then the test is successful.

64. The list of followers will be retrieved from the database and displayed on the followers page

Use Cases

USE CASE 1: Register

Related Requirements: REQ 1

Initiating Actor: Any user: Socialite, event organiser or promoter

Actor's Goals: To be a registered user for TurntApp

Participating Actor: Mobile device

Precondition: Users are intending to register and have download TurntApp on their mobile

device

Post condition: Users will be registered on the system and added to the database

Flow of Events for Main Success Scenario:

25. Users should download TurntApp from their app store which will then be installed onto their mobile device.

26. Users should locate TurntApp on their device and launch the application.

27. New users will be prompted to click on the "register" tab and create a

new account. This will then display registration details.

28. User will enter their credentials and create a password. Users will be required to provide the following details:

- Username
- Their name and surname
- Phone number
- Email address
- Password
- A profile picture

5. Users are then required to click the “register” tab which will add the user to the database

Use Case 2: Login

Related Requirements: REQ 2, REQ 1

Initiating Actor: Any user: Socialite, event organiser or event promoter

Actor’s Goal: To log onto the user’s personal account

Participating Actor: Mobile device

Precondition: Users are already registered and their account exists in the database

Post condition: Users will log into their account which will confirm the creation of their account

Flow of Events for Main Success Scenario:

65. Users should locate TurntApp on their device and launch the application.

66. Users will be prompted to click on the “Login” tab, this will then launch the log in page

67. Users will be prompted to enter their email address and password

68. The application will then retrieve the users account details from the database and log onto the user's account.

Flow of Events for Extensions:

69. Users should locate TurntApp on their device and launch the application.

70. Users will be prompted to click on the "Login" tab, this will then launch the log in page

71. Users will be prompted to enter their email address and password

72. If the email address or password are incorrect, the user will be required to re-enter their credentials

USE CASE 3: Create preferences

Related Requirements: REQ 3, REQ 2, REQ 1

Initiating Actor: Socialite

Actor's Goal: To edit and create their profile

Participating Actor: Mobile device

Precondition: Users have already registered and are logged into their account

Post condition: Users will provide a description of their preferences or select their categories

of interests which they will attend events.

Flow of Events for Main Success Scenario:

73. Socialites should be able to navigate to personalise account tab

74. Socialites will have a list of categories which they will be able to select from that will suite their interests

75. Socialites will then save their personalised information

USE CASE 4: Description of establishment

Related Requirements: REQ 3, REQ 2, REQ 1

Initiating Actor: Event organiser

Actor's Goal: Establishment or organisation provides a description of their entity

Participating Actor: Mobile device

Precondition: Users have already registered and are logged into their account

Post condition: Users will provide a description of their preferences establishment or organisation and provide the location of event or organisation which will be viewed by other users

Flow of Events for Main Success Scenario:

76. Event organisers should navigate to the “profile” tab, which will then launch the profile page
77. Event organisers will be provided a text field tab where they could give a description of their establishment or organisation.
78. Event organisers will be able to provide the Google map location of their establishment or organisation.
79. Users will then click on the “upload” tab which will update the users profile onto the database.

USE CASE 5: Create event

Related Requirements: REQ 4, REQ 2, REQ 1

Initiating Actor: Any user: Socialites, event organiser, event promoter

Actor's Goal: To create an event

Participating Actor: Mobile device

Precondition: Users have already registered and are logged into their account

Post condition: Users should be able to create an event which will be updated onto the database

Flow of Events for Main Success Scenario:

80. Event organisers should be able to navigate to “profile” account tab
81. User should then select the create event tab
82. User will then provide the necessary information and description of the event.
83. User will have to provide the following details:
 - Event name
 - Event geographic location on Google maps
 - Entertainment lineup: DJs, celebrities or dignitaries
 - Admission prices for general access and VIP access
 - Date and time of event
 - Poster
84. User will have an option of providing a poster to advertise the event.
85. User must provide a Google map location of the event
86. User must save the new event which will then be updated onto their profile and added to the database.

USE CASE 6: Search events

Related Requirements: REQ 5, REQ 4, REQ 2, REQ 1

Initiating Actor: Any user: Socialites, event organiser, event promoter

Actor's Goal: To search for an event to attend

Participating Actor: Mobile device

Precondition: Users have already registered and are logged into their account

Post condition: Users should be able to view events

Flow of Events for Main Success Scenario:

87. User must navigate to the search tab.

88. Users are required to search the event they are intending on attending, the search results are then accessed and retrieved from the database and then displayed on the screen.

USE CASE 7: Confirm attendance

Related Requirements: REQ 4, REQ 6, REQ 2, REQ 1

Initiating Actor: Socialites

Actor's Goal: Confirm attendance to an event

Participating Actor: Mobile device

Precondition: Users have been registered and logged into their account.
Users have searched an event and view event details

Post condition: User will have confirmed attendance to an event which will be uploaded to their upcoming events and calendar

Flow of Events for Main Success Scenario:

89. Users should navigate to the "search" tab, which will then display the search page

90. Users are then required to search the event that they are intending on attending and click on the event

91. Users should then select the attending event option

92. The event will then appear on their list of upcoming events and be uploaded onto their calendar

USE CASE 8: View upcoming event

Related Requirements: REQ 4, REQ 9, REQ 2, REQ 1

Initiating Actor: Any user: Socialites, event organisers, event promoters

Actor's Goal : View events users have confirmed attendance to

Participating Actor: Mobile device

Precondition: Users have been registered and logged into their account and have confirmed attendance to an event

Post condition: User will be able to view the upcoming events they will be attending

Flow of Events for Main Success Scenario:

93. User have logged into their account and navigated to the upcoming event tab, this will display all the upcoming events that the users have confirmed attendance

USE CASE 9: Retrieve event directions

Related Requirements: REQ 4, REQ 2, REQ 1

Initiating Actor: Socialites

Participating Actor: Mobile device

Precondition: Users have been registered and logged into their account and have already confirmed attendance to an event

Post condition: User will have retrieved the directions to an event which they have already confirmed attendance

Flow of Events for Main Success Scenario:

94. Users have to navigate to the upcoming events tab which will display

all their upcoming events

95. Users have to select an event which they wish to retrieve directions for, this will then display an menu

96. Users should the then select the directions option, this will then launch the google map application and display the directions

USE CASE 10: Retrieve event directions

Related Requirements: REQ 9, REQ 5, REQ 2, REQ 1

Initiating Actor: Socialites

Actor's Goal: Retrieve direction to an event a user has confirm attendance to

Participating Actor: Mobile device

Precondition: Users have been registered and logged into their account and have already confirmed attendance to an event

Post condition: User will have retrieved the directions to an event which they have already confirmed attendance

Flow of Events for Main Success Scenario:

97. Users have to navigate to the "upcoming" events tab which will display all their upcoming events

98. Users have to select an event which they wish to retrieve directions for, this will then display an menu

99. Users should the then select the directions option, this will then launch the google map application and display the directions

USE CASE 11: View user event attendance

Related Requirements: REQ 11, REQ 6

Initiating Actor: Socialite

Actor's Goals: To view which users will be attending an event

Participating Actor: Mobile device

Precondition: Users will have had to confirm the attendance of an event

Post condition: Users will be able to view which users will be attending an event

Flow of Events for Main Success Scenario:

100. Users should search the event that they are intending on attending and click on that event to view
101. Users should then click on the view people attending which will display the users who will be attending the event

USE CASE 12: Follow User

Related Requirements: REQ 12, REQ 11, REQ 5

Initiating Actor: Socialites

Actor's Goal: Follow other users

Participating Actor: Mobile device

Precondition: Users have been registered and logged into their account

Post condition: User will be able to follow other users and view their upcoming events

Flow of Events for Main Success Scenario:

102. Users are required to search for an event that they are willing to attend and click on that event.
103. Users are then required to view users attendance for the event they have searched

104. Users are then required to click on the users they want to follow and click on the follow users button.

Flow of Events for Extensions:

105. Users are required to search for the users they want to attend from the search tab
106. Users are then required to click on the users they want to follow and click on the follow users button.