Dating Go Project Scheduling

Project Start Date: Monday, May 13th 2023
Project End Date: Friday, May 24nd 2023

Our project is scheduled to commence on Monday, May 13th, 2023, and conclude on Friday, May 24nd, 2023. The estimated duration for the project is 1.5 weeks, calculated based on a 3-person team working 8-hour days from Monday through Friday. Weekends will be excluded from the schedule, allowing the team to have Saturday and Sunday off. This results in a total of 10 working days, providing ample time for the team to complete the project's tasks. This timeline is made under the assumption that there will be breaks in work throughout the day, but it is essential to note that real-world projects may encounter unforeseen challenges or require additional time for meetings, reviews, or adjustments.

Work shown below:

Scope:

- 1.1 Profile Software
  - 1.1.1 Create, View, Delete Profile
  - 1.1.2 Support adding photos for your profile.
  - 1.1.3 Support adding a bio for your profile
  - 1.1.4 Support adding hobbies for your profile
  - 1.1.5 Support adding preferences for your profile
- 1.2 Mingling
  - 1.2.1 Allow a user to initiate and send a mingle request to another user
  - 1.2.2 Allow a user to accept or reject a mingling request
  - 1.2.3 Send and receive messages to accepted matches
  - 1.2.4 Search messages via text query
  - 1.2.5 Support blocking profiles & messages
  - 1.2.6 Allow termination of current mingle
  - 1.2.7 Tracks how long two users mingle with each other which is used for the calculation of the compatibility score with future possible matches
- 1.3 Matching
  - 1.3.1 Display all other users open to mingle in the same area
  - 1.3.2 Allow user to view the profiles of other users in the area
  - 1.3.3 Display compatibility scores between two users based on calculation of preferences and matching history
  - 1.3.4 Allow a user to turn off mingling status and have geographic location not be displayed to other users
  - 1.3.5 Support reporting profiles
- 1.4 Geographical Tracking and Displaying
  - 1.4.1 Tracks geographic location of all concurrent users

1.4.2 Support a graphical geographic map that displays users as clickable pins and mingling hot spots

1.4.3 Calculates and displays mingling hot spots on map based on trending and frequent mingling of users

Function point calc:

1. Determine function category count:

| | Function Category | Count | Complexity | | | Count × Complexity |
|---|---|---|---|---|---|---|
| | | | Simple | Average | Complex | |
| 1 | Number of user input | 16 | 3 (15) | 4 (1) | 6 | (3x15) + (4x1) = 49 |
| 2 | Number of user output | 7 | 4 (3) | 5 (4) | 7 | (4x3) + (5x4) = 32 |
| 3 | Number of user queries | 3 | 3 (2) | 4 | 6 (1) | (3x2) + (6x1) = 12 |
| 4 | Number of data files and relational tables | 2 | 7 (1) | 10 (1) | 15 | (7x1) + (10x1) = 17 |
| 5 | Number of external interfaces | 1 | 5 | 7 (1) | 10 | 7x1 = 7 |
| | | | | | GFP | 117 |

a. User Input:
   i. From profile management:
      1. Create account, add photos, add bio, add hobbies, add preferences
   ii. From Mingling:
      1. Send mingle request, accept mingle request, reject mingle request, send message, see message, block a profile, terminate a mingle
   iii. From Matching:
      1. Toggle mingle status, hide location, report profile
   iv. From Geographical Tracking and Displaying:
      1. Track location

b. User Output:
   i. From profile management:
      1. View profile
   ii. From Mingling:
      1. Receive/view message
   iii. From Matching:
      1. See available users to mingle, view profiles, see compatibility score
   iv. From Geographical Tracking and Displaying:
      1. Display users locations, display mingling hotspots

c. User Queries:
   i. From profile management:
      1. See history
   ii. From Mingling:
      1. See mingle requests, See messages

d. Data files and relational tables:
    i. From profile management:
        1. profile
    ii. From Mingling:
        1. mingle

e. External interfaces:
    i. From Geographical Tracking and Displaying:
        1. Geolocation service

Process Complexity Calc:

(1) Does the system require reliable backup and recovery? 4

The system requires reliable backup and recovery to ensure the safety and integrity of user data

(2) Are data communications required? 3

Data communications are required for messaging, match updates, and other interactions between users.

(3) Are there distributed processing functions? 2

Distributed processing functions may be present for handling user requests and interactions across servers.

(4) Is performance critical? 4

Performance is critical for providing a seamless and responsive user experience, especially during match updates and messaging.

(5) Will the system run in an existing, heavily utilized operational environment? 4

DatinGo will operate in a heavily utilized environment with many concurrent users, adding significant complexity.

(6) Does the system require online data entry? 3

The system requires online data entry for profile creation, messaging, and other interactions.

(7) Does the online data entry require the input transaction to be built over multiple screens or operations? 4

Online data entry involves multiple screens for profile creation and editing, messaging, etc.

(8) Are the master files updated online? 3

Master files, such as user profiles and match data, may be updated online.

(9) Are the inputs, outputs, files, or inquiries complex? 4

Inputs, outputs, files, and inquiries involve complex data structures and interactions, especially for matching and messaging.

(10) Is the internal processing complex? 4

Internal processing, including matchmaking algorithms and message handling, is complex.

(11) Is the code designed to be reusable? 2

Code reusability may be considered to ensure efficient development and maintenance.

(12) Are conversion and installation included in the design? 3

Conversion and installation processes are included but may not be overly complex.

(13) Is the system designed for multiple installations in different organizations? 4

The system may need to support multiple installations in different organizations, adding complexity.

(14) Is the application designed to facilitate change and ease of use by the user? 4

The application aims to facilitate change and ease of use by the user, which adds complexity to the design and development process.

PC = 0 (no influence), 1 (incidental), = 2 (moderate), = 3 (average), = 4 (significant), = 5 (essential)

Total = 48

PCA= 0.65 + 0.01(48)

PCA = 1.13

FP = GFP x PCA

FP = 117 x 1.13

FP = 132.21

E = FP / productivity

E = 132.21/40

E = 3.30525 ≈ 3.5 person-weeks

Project duration (D):

D = E / team size

D = 3.5 / 3 = 1.17 weeks

D ≈ 1.5 weeks