**NMA! Use Cases**

**1.**

**Use Case:** Login

**Description:** When first opening the app, the user will be presented with a login screen where they can input their login credentials.

**Related Use Cases:** Create Account “Extends Login”, Login as Guest “Extends Login”

**Main Actor:** General Users

**Precondition:** User has the application downloaded onto their device.

**Invariant:** Connection to backend database

**Successful Post Condition:** User logs into the app and their main page is displayed with their current tree.

| **Steps:** | **System Response:** |
| --- | --- |
| User opens the application. | System displays a page including an interactable login dialog box. |
| Users type their username and password into the box. | System either accepts credentials or displays a wrong username/password error. |
| Users are now able to view their main page of the application, with their current tree. |  |

**2.**

**Use Case:** Create Account

**Description:** Users will be able to create a NMA! account with a username and password being stored in a database.

**Extends:** Login

**Related Use Cases:** Login “Extended by Create Account”

**Main Actor:** General Users

**Precondition:** User has the application downloaded onto their device.

**Invariant:** Connection to backend database

**Successful Post Condition:** User creates a new account and is able to log into it.

| **Steps:** | **System Response:** |
| --- | --- |
| User opens the application. | System displays the login page described in the previous use case. |
| User taps on a button under the login window that says “create and account.” | System displays a popup prompting the user to enter account creation info such as name, username and desired password |
| User taps a create account button. | System creates new user account in the database. |
| Users can now log into their newly created account. |  |

**3.**

**Use Case:** View Calendar

**Description:** User will be able to view a calendar displaying upcoming events.

**Main Actor:** General Users

**Precondition:** Actor is on the main tree page of the application.

**Successful Post Condition:** Calendar page is displayed to the user.

| **Steps:** | **System Response:** |
| --- | --- |
| User opens main page | Main page of application is displayed |
| User taps on activity tracker tab | System displays monthly calendar |
| User now sees the monthly calendar and can push buttons at the top of the screen to change views. |  |

**4.**

**Use Case:** Add Calendar Events

**Description:** Users will be able to add new events to the calendar.

**Main Actor:** General Users

**Precondition:** User must be on the calendar page of the application.

**Invariant:** Connection to a database storing calendar items.

**Successful Post Condition:** Event is added to the calendar.

| **Steps:** | **System Response:** |
| --- | --- |
| User navigates to the calendar page of the application. | System displays calendar page to the user |
| User presses a plus icon to add an event. | System displays a popup to add an event. User is able to specify different aspects of the event. |
| User enters information about the event and presses add. | System updates the calendar display with the new event added. |

**5.**

**Use Case:** Import calendar events from Google calendar

**Description:** Users will be able to link their Google calendar to the application, so their events can be imported to the NMA! calendar page.

**Main Actor:** General User

**Precondition:** User must be on the calendar page of the application.

**Invariant:** Connection to Google and database.

**Successful Post Condition:** Calendar displays events from user’s Google calendar.

| **Steps:** | **System Response:** |
| --- | --- |
| User navigates to the calendar page of the application. | System displays the calendar page to the user. |
| User taps on a three dots icon. | System displays popup page with an option to sync with Google |
| User taps on the sync with google option and enters google account information. | System communicates with Google to import events to the NMA! calendar. |
| Users are able to view events from their google calendar within NMA! |  |

**6.**

**Use Case:** Share Time on Task Data

**Description:** User will be able to send other users a week's worth of time on task data.

**Main Actor:** Students

**Precondition:** Actor should be on the leaderboard page of the application

**Invariant:** Connection to a database

**Successful Post Condition:** User’s weekly data for time on task has been shared with another account.

| **Steps:** | **System Response:** |
| --- | --- |
| User navigates to the leaderboard tab of the application. | Leaderboard page is displayed on the device. |
| User taps on a “share data” button on the left side of the screen. | Window is displayed asking for the receiving account username. |
| User enters the username into the window. | The system sends the last 7 days worth of time on task data to the specified user. |

**7.**

**Use Case:** Add To-Do List Task

**Description:** User will be able to add itemized tasks to a to do list.

**Main Actor:** General Users

**Precondition:** User must be on the calendar page of the application.

**Invariant:** Connection to a database storing to-do list tasks

**Successful Post Condition:** Task is added to to-do list.

| **Steps:** | **System Response:** |
| --- | --- |
| User navigates to the calendar page of the application. | System displays calendar page to the user |
| User presses To-Do list button. | NMA! To-Do list appears. |
| User presses “Add Task” button. | System displays popup to add event. |
| User enters information, chooses month/day/year setting and presses “add”. | Embedded To-Do list updates and presents added task. |

**8.**

**Use Case:** Check-off To-do List Task

**Description:** User will be able to check-off added itemized tasks from a to do list.

**Main Actor:** General Users

**Precondition:** User must be on the calendar page of the application.

**Invariant:** Connection to a database storing to-do list tasks

**Successful Post Condition:** Task is checked-off from to-do list.

| **Steps:** | **System Response:** |
| --- | --- |
| User navigates to the calendar page of the application. | System displays calendar page to the user |
| User presses To-Do list button. | NMA! To-Do list appears. |
| User presses “Check Off” button. | System presents check-boxes by tasks. |
| User selects task(s) and hits “confirm”. | Embedded To-Do list updates and presents checked-off tasks as complete. |

**9.**

**Use Case:** Login as Guest

**Description:** When first opening the app, the user will be presented with a login screen where they can input their login credentials, or login as a guest.

**Extends:** Login

**Related Use Cases:** Login “Extended by Login as Guest”

**Main Actor:** General Users

**Precondition:** User has the application downloaded onto their device.

**Successful Post Condition:** User enters the app and their main page is displayed with their current tree.

| **Steps:** | **System Response:** |
| --- | --- |
| User opens the application. | System displays a page including an interactable login dialog box. |
| Users presses “Log-in as Guest” | System begins process without connection to backend server. |
| Users are now able to view their main page of the application, with their current tree. |  |

**10.**

**Use Case:** View Shop

**Description:** User will be able to view a shop displaying purchasable trees, boosts, and freezes.

**Main Actor:** General Users

**Precondition:** Actor is on the main tree page of the application.

**Successful Post Condition:** Shop page is displayed to the user.

| **Steps:** | **System Response:** |
| --- | --- |
| User opens main page | Main page of application is displayed |
| User clicks on the shop tab | Shop page of the application is displayed |

**11.**

**Use Case:** Purchase Item

**Description:** User will be able to purchase an item from the shop.

**Main Actor:** General Users

**Precondition:** Actor is on the shop page of the application.

**Invariant:** Connection to a database to process financial transaction.

**Successful Post Condition:** Item is added to user account.

| **Steps:** | **System Response:** |
| --- | --- |
| User opens main page | Main page of application is displayed |
| User clicks on the shop tab | Shop page of the application is displayed |
| User presses on item they wish to purchase | System presents confirmation |
| User chooses yes or no to purchase. | If yes, system processes transaction. System updates, user is given “processed successfully” notification, and item is added to account - **if financials are not found, proceed to third system response of Enter Financials.** If transaction declines, such is presented to user. |

**12.**

**Use Case:** Enter Financials

**Description:** User will be able to view a shop displaying purchasable trees, boosts, and freezes.

**Main Actor:** General Users

**Precondition:** Actor is on the settings page of the application.

**Invariant:** Connection to a database storing financial information.

**Successful Post Condition:** Purchased item is added to account.

| **Steps:** | **System Response:** |
| --- | --- |
| User opens main page | Main page of application is displayed |
| User clicks on the settings tab | Settings page of the application is displayed |
| User clicks “financial information” | System presents a box showing already entered financial information available for editing, or an empty box for editing. |
| User clicks “edit”. | System allows box to be edited. |
| User fills out financial information and clicks “save”. | System updates on-file account information. |

**13.**

**Use Case:** View Settings

**Description:** User will be able to view system and account settings available to be changed.

**Main Actor:** General Users

**Precondition:** Actor is on the main tree page of the application.

**Successful Post Condition:** Settings page is displayed to the user.

| **Steps:** | **System Response:** |
| --- | --- |
| User opens main page | Main page of application is displayed |
| User clicks on the settings tab | Settings page of the application is displayed |

**14.**

**Use Case:** Turn On Dark Mode

**Description:** User will be able to change system to dark-mode accessibility setting.

**Main Actor:** General Users

**Precondition:** Actor is on the settings page of the application.

**Successful Post Condition:** Color scheme is switched to dark mode.

| **Steps:** | **System Response:** |
| --- | --- |
| User opens main page | Main page of application is displayed |
| User clicks on the settings tab | Settings page of the application is displayed |
| User clicks dark mode toggle | System updates color scheme in dark mode. |

**15.**

**Use Case:** Remind User of Due Dates

**Description:** User will be reminded of their most salient due dates.

**Main Actor:** General Users

**Precondition:** Actor has a due date entered

**Successful Post Condition:** The user receives an alert that their due date is *x* hours away, where *x* is the number of hours until the due date (standard is the user will receive notifications 48, 24, 12, and 6 hours before the due date).

| **Steps:** | **System Response:** |
| --- | --- |
| User opens main page | Main page of application is displayed |
| User clicks to-do list tab | To-do list page of the application is displayed |
| User enters a to-do and a date to do it by | System reminds the user when the due date is 48, 24, 12, and 6 hours away. |

**16.**

**Use Case:** Turn On Push Notifications

**Description:** User will be able to enable push notifications.

**Main Actor:** General Users

**Precondition:** Actor is on the settings page of the application

**Successful Post Condition:** The user is able to receive push notifications from NMA!.

| **Steps:** | **System Response:** |
| --- | --- |
| User opens main page | Main page of application is displayed |
| User clicks on the settings tab | Settings page of the application is displayed |
| User clicks push notifications toggle | System updates to enable push notifications to be sent. |

**17.**

**Use Case:** Plant Real Trees

**Description:** User will be able to convert their grown trees to real trees

**Main Actor:** General Users

**Precondition:** User is on the settings page of the application

**Successful Post Condition:** The user is shown a pledge that AndroidMonkeProductivity will plant a number of trees.

| **Steps:** | **System Response:** |
| --- | --- |
| User opens main page | Main page of application is displayed |
| User clicks on the settings tab | Settings page of the application is displayed |
| User clicks plant my trees button | The pledge that AndroidMonke Productivity will plant a number of trees equal to 1/10th the users grown trees is shown |

**18.**

**Use Case:** Slide Between Pages

**Description:** User will be able to slide between desired pages

**Main Actor:** General Users

**Precondition:** User launches application

**Successful Post Condition:** The user is at their desired location within the application.

| **Steps:** | **System Response:** |
| --- | --- |
| User opens main page | Main page of application is displayed |
| User clicks on/slides to their desired panel | The desired panel is displayed |