NMA! Use Cases

Use Case: Login to the Application
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: Sign up, Login with Google, Login as Guest
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.	

Use Case: Create an account
Description: Users will be able to create a NMA! account with a username and password being stored in a database.
Extends: Login to the Application
Related Use Cases: Login to the application
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.	

Use Case: View Calendar
Description: User will be able to view a calendar displaying upcoming events.
Related Use Cases: Add calendar event, remove calendar event, import Google calendar 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.	

Use Case: Add Calendar Events
Description: Users will be able to add new events to the calendar.
Extends: View Calendar
Related Use Cases: View Calendar, Import events from google 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.

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.
Extends: Add Calendar Events
Related Use Cases: View Calendar, Add Calendar Events
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!	

Use Case: Share Data
Description: User will be able to send other users a week's worth of time on task data.
Related Use Cases: Viewing shared 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.

Use Case: Add To-Do List Task
Description: User will be able to add itemized tasks to a to do list.
Related Use Cases: View Calendar, Check-Off To-Do Task
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.

Use Case: Check-off To-do List Task
Description: User will be able to check-off added itemized tasks from a to do list.
Extends: Add To-Do List Task
Related Use Cases: View Calendar, Add To-Do List Task
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.

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.
Related Use Cases: Sign up, Login with Google, Login to the Application

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.	

Use Case: View Shop
Description: User will be able to view a shop displaying purchasable trees, boosts, and freezes.
Related Use Cases: Purchase Item
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

Use Case: Purchase Item
Description: User will be able to purchase an item from the shop.
Extends: View Shop
Related Use Cases: View Shop, Enter Financials
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.

Use Case: Enter Financials
Description: User will be able to view a shop displaying purchasable trees, boosts, and freezes.
Extends: Settings, Purchase Item
Related Use Cases: View Settings, Turn on Dark Mode
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.

Use Case: View Settings
Description: User will be able to view system and account settings available to be changed.
Related Use Cases: Enter Financials, Turn On Dark Mode
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

Use Case: Turn On Dark Mode
Description: User will be able to change system to dark-mode accessibility setting.
Extends: View Settings
Related Use Cases: View Settings, Enter Financials
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.

Use Case: Remind User of Due Dates
Description: User will be reminded of their most salient due dates.
Extends: Add To-Do List
Related Use Cases: Turn on Push Notifications
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.

Use Case: Turn On Push Notifications
Description: User will be able to enable push notifications.
Extends: View Settings
Related Use Cases: View Settings, Remind User of Due Dates, Add To-Do List
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.

Use Case: Plant Real Trees
Description: User will be able to convert their grown trees to real trees
Extends: View Settings, Purchase Item
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

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