"Prioritizen" a Social Scheduling App for the Tizen Platform

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Problem: Social Scheduling is not Easy

Problem Statement

- There is no quick, easy way to set up a casual get-together with your friends.
- Difficult to find a time that works for everyone.
- Difficult to coordinate without being spammy.
- Difficult to have everyone be on the same page.

Benchmarking, Needfinding

- Most people do not have that many "events".
- Planners are picky and wary of party crashers.
- People need to be invited to an event, instead of "count me in".
- Little benefit to sharing events with the world because the vainest events are exclusive (and spam).

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Benchmarking, Needfinding

- **Many events happen very soon, with little build-up.**
- **Events have a short shelf-life.**
- **Overkill to "plan an event" for a simple, casual outing.**
- **People resist advanced commitments, unless:**
  - confident they will attend (closer to event time)
  - need to reserve a spot before it fills up
  - there is another incentive (party, free gifts...)

The App

The App Concept

- **Focuses on short-term meetings.**
  - perfect for mobile phones
  - easily allow planning for "today" or "tomorrow", but still allow option to easily plan further ahead
- **Streamlined creation process.**
  - only one screen with minimal number of input fields
  - advanced options available, but not required

The App Concept

- **Syncs with phone's contacts, groups, calendar**
  - invite friends in one tap by inviting entire groups at once
  - automatically allow option to save an event group to phone
  - event information available via app tab or in phone calendar
  - can add, edit, delete phone contact groups from app tab

The App Concept

- **Limits the number of screens the user has to navigate**
- **4 main tabs for functionality**
  - tab 1: a view of current events on the user's planner (to edit or manage)
  - tab 2: the "create an event" screen
  - tab 3: a view of the phone's contact groups (to invite or edit)
  - tab 4: the settings tab

Tab 1


1:27PM
My Plans
Create Plan
My Groups
Settings
New Plans
Upcoming Plans
Past Plans
SGM
2 Days Ago
SGM
2 Days Ago
YUP
1 Day Ago
Created on Android!
COOLIO
2 Days Ago
Created on Android!
COOLX
2 Days Ago
Created on Android!
WORKS
2 Days Ago
EXIT
EDIT
ERASE
NEW

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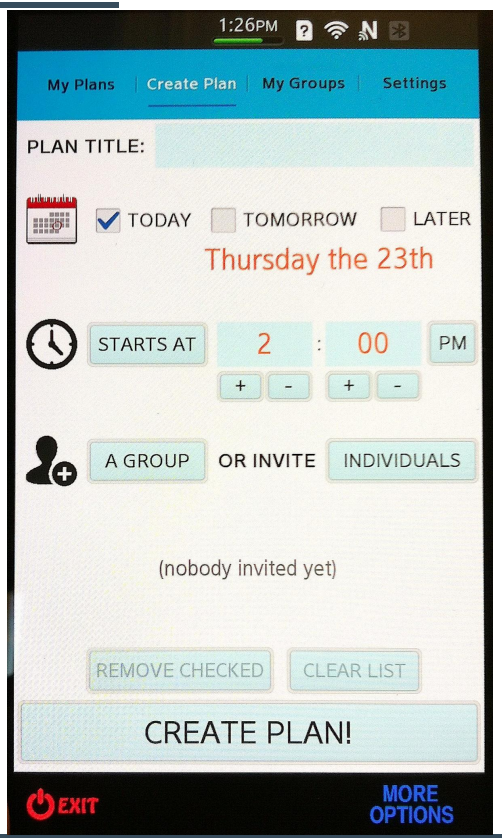
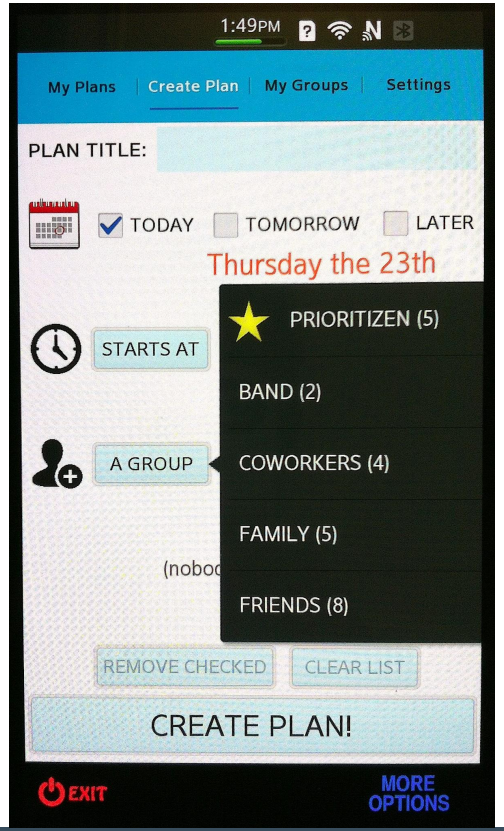
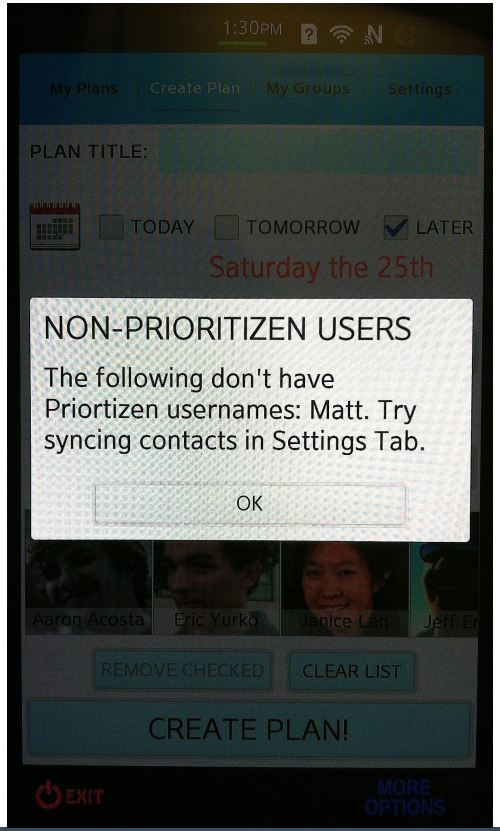
Tab 2


1:26PM
My Plans
Create Plan
My Groups
Settings
PLAN TITLE:
TODAY
TOMORROW
LATER
Thursday the 23th
STARTS AT
2
00
PM
A GROUP
OR INVITE
INDIVIDUALS
(nobody invited yet)
REMOVE CHECKED
CLEAR LIST
CREATE PLAN!
EXIT
MORE OPTIONS


1:49PM
My Plans
Create Plan
My Groups
Settings
PLAN TITLE:
TODAY
TOMORROW
LATER
Thursday the 23th
STARTS AT
A GROUP
PRIORITIZEN (5)
BAND (2)
COWORKERS (4)
FAMILY (5)
FRIENDS (8)
REMOVE CHECKED
CLEAR LIST
CREATE PLAN!
EXIT
MORE OPTIONS


1:30PM
My Plans
Create Plan
My Groups
Settings
PLAN TITLE:
TODAY
TOMORROW
LATER
Saturday the 25th
NON-PRIORITIZEN USERS
The following don't have Priortizen usernames: Matt. Try syncing contacts in Settings Tab.
OK
Aaron Acosta
Eric Yurko
Janice Lan
REMOVE CHECKED
CLEAR LIST
CREATE PLAN!
EXIT
MORE OPTIONS

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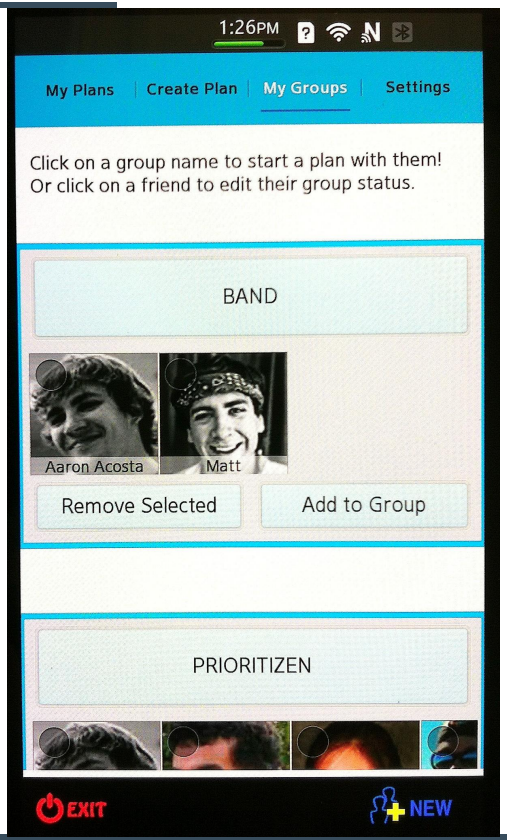
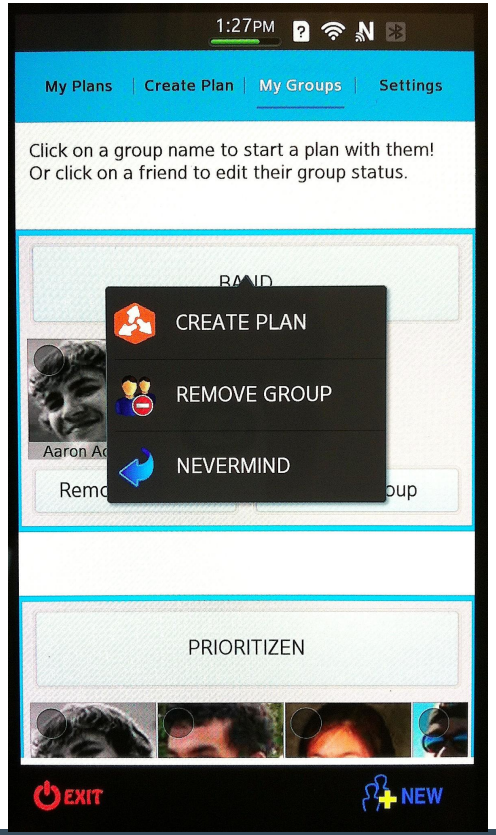
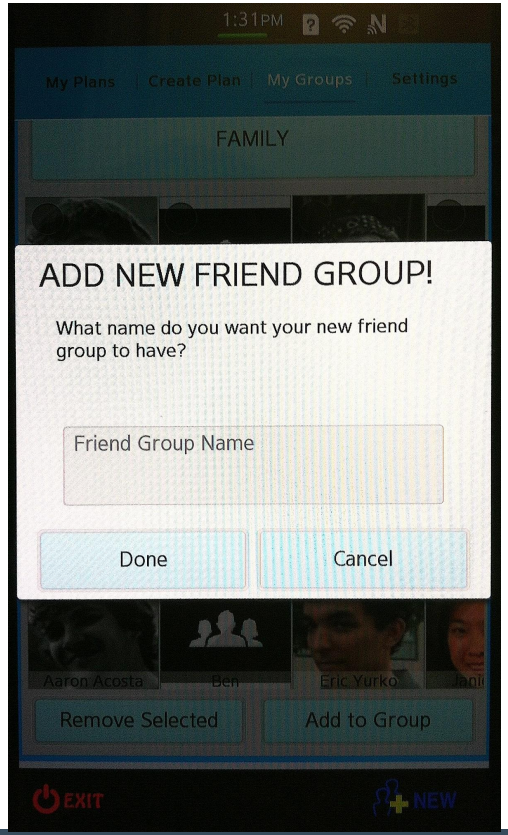
Tab 3


1:26PM
My Plans
Create Plan
My Groups
Settings
Click on a group name to start a plan with them!
Or click on a friend to edit their group status.
BAND
Aaron Acosta
Matt
Remove Selected
Add to Group
PRIORITIZEN
EXIT
NEW


1:27PM
My Plans
Create Plan
My Groups
Settings
Click on a group name to start a plan with them!
Or click on a friend to edit their group status.
CREATE PLAN
REMOVE GROUP
NEVERMIND
PRIORITIZEN
EXIT
NEW


1:31PM
My Plans
Create Plan
My Groups
Settings
FAMILY
ADD NEW FRIEND GROUP!
What name do you want your new friend group to have?
Friend Group Name
Done
Cancel
Aaron Acosta
Eric Yurko
Remove Selected
Add to Group
EXIT
NEW

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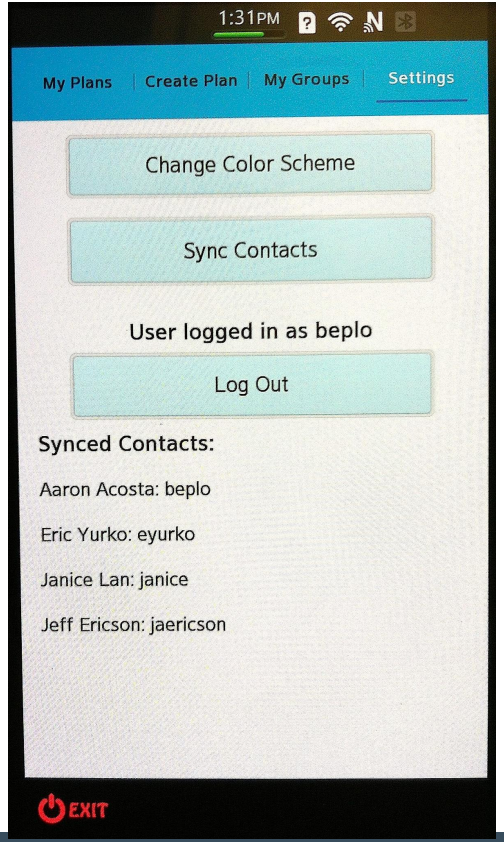
Tab 4


1:31PM
My Plans
Create Plan
My Groups
Settings
Change Color Scheme
Sync Contacts
User logged in as beplo
Log Out
Synced Contacts:
Aaron Acosta: beplo
Eric Yurko: eyurko
Janice Lan: janice
Jeff Ericson: jaericson
EXIT

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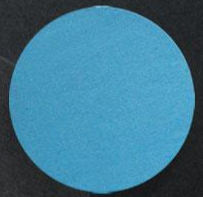
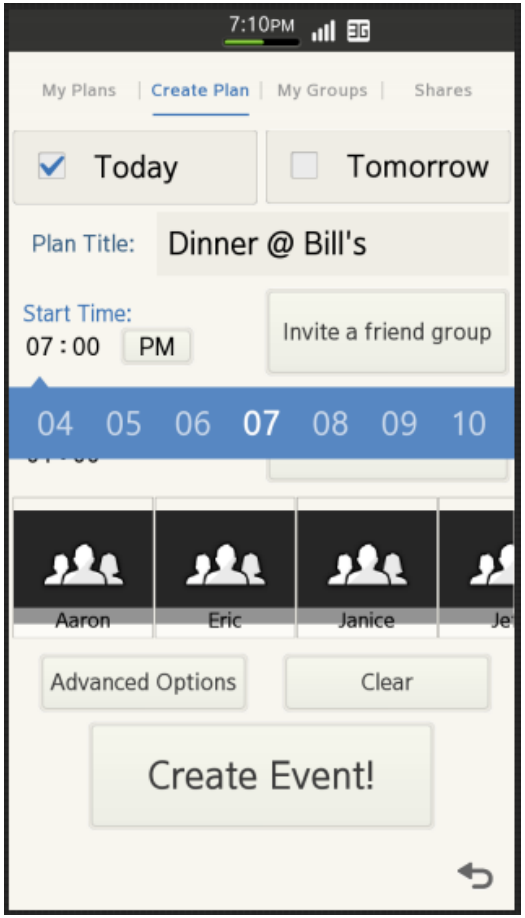
Challenges

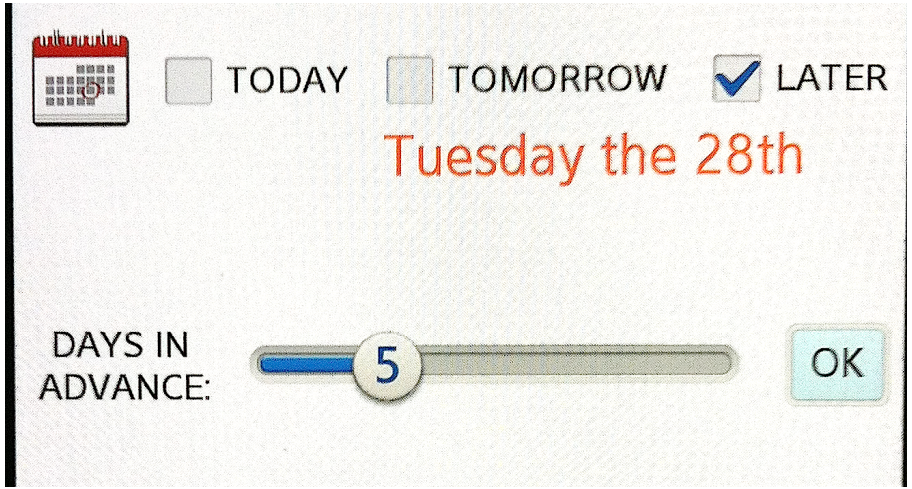


UI Challenges

- **(Specifically, EditDate & EditTime UI)**
  - small window of space for user to tap
  - little room for error when scrolling
  - unable to edit size and other properties, quirks



UI Challenges



- **Our personalized "select date" UI**
  - large, simple buttons for "today" and "tomorrow", scroll bar for later dates
  - may not be applicable for planning too far in advance, but perfect for our app

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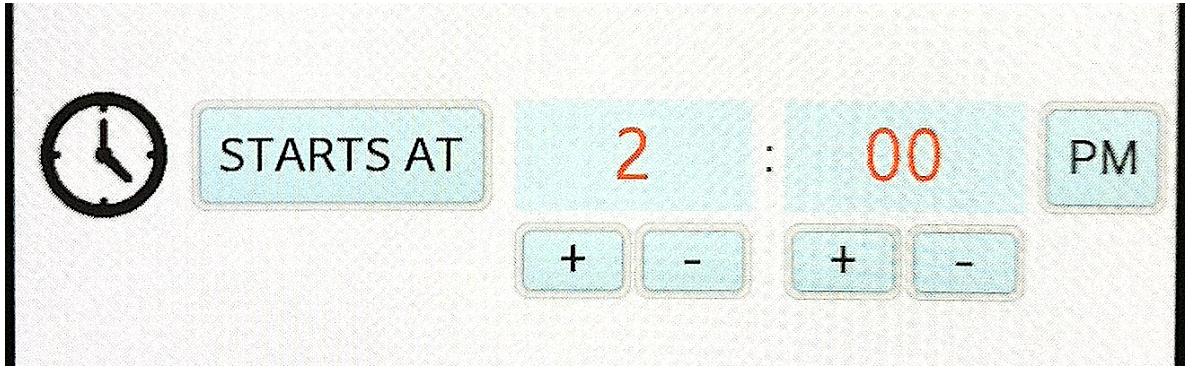
UI Challenges



- **Our personalized "select time" UI**
  - large, simple fields for hour & minute
  - buttons for incrementing/decrementing hour by 1, incrementing/ decrementing minute by 15
  - Gives the user the option to choose whatever times they like, but doesn't force them to change their intuition of traditional UI

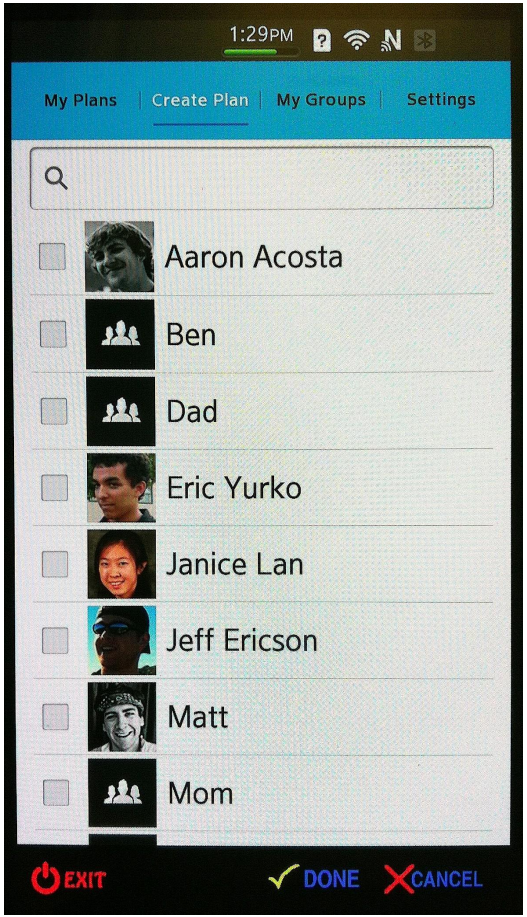
UI Challenges

- **Contact "PICK" Operation**
  - nice display, could have saved us tedious UI dev work
  - however, it would not allow declaration of **`AddressBookManager`** class
  - (app would crash on the following line)

```
AddressBookManager *aBM =
AddressBookManager::GetInstance();
```

UI Challenges

- **Our Personalized Contact "PICK" Operation**
  - we recreated it by using a separate **`Panel`** with a ListView that held an item for each contact (basically the same, but not buggy)
  - In general, when faced with UI challenges, there is usually a way to use other UI that could help overcome these challenges



Development Challenges

- **Working without a sim card**
  - functionalities cut short: text messaging, notifications, GPS tracking...
  - limits our testing to Tizen users with the app
  - forced to rely on email addresses and http connections with server for communication

Development Challenges

- **Working without a sim card (security)**
  - made app unable to recognize device by phone number (we were unable to test such functionality)
  - forced us to revert to classic username/password-style login, which raised more issues

Development Challenges

- **HttpSession - app crashed when multiple sessions were open**
- **Solution: Singleton Style wrapper class for HttpSession**

```
AppHttpSession::AppHttpSession() {
            __pHttpSession = new (std::nothrow) HttpSession();

            result r = __pHttpSession->Construct(NET_HTTP_SESSION_MODE_NORMAL, null,
                                                 L"https://api.prioritizen.com", null);
            if (IsFailed(r))
            {
                        delete __pHttpSession;
                        __pHttpSession = null;
                        AppLogTag("HttpFail", "Failed to create the HttpSession.");
            }
            r = __pHttpSession->SetAutoRedirectionEnabled(true);
            if (r != E_SUCCESS) AppLogTag("HttpFail", "Failed to set the redirection automatically.");
}
```

Development Challenges

- **HttpSession - app crashed when multiple sessions were open**
- **Solution: Singleton Style wrapper class for HttpSession**

```
AppHttpSession::getTransaction(NetHttpMethod method, JsonObject* jsonObject, String uri,
IHttpTransactionEventListener* listener) {
            if (!instanceFlag) {
                        single = new AppHttpSession();
                        instanceFlag = true;
            }

            result r = E_SUCCESS;

            HttpTransaction* httpTransaction = null;
            HttpRequest* httpRequest = null;
            HttpSession *httpSession = single->getHttpSession();
            ...
            ...
```

Moving Forward

Moving Forward

- **Reminders & Notifications**
- **Smart Features**
  - (smart defaults, learning from user's history or preferences for time and/or location)
  - utilizing map integration to give "smart" reminders of the event (e.g. notifications such as, "Due to weather and traffic conditions, you should probably leave in 10 minutes if you would like to arrive on time.")

Moving Forward

- Twilio Integration (API for texting)
- Group Messaging System
- Social Integration (Facebook, Twitter?)
- Voting Features for time & location of events

Thank you!

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