MeeGo* Application Design Guidelines

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Chapter 1 – Five Step Design Process

Inside
Defining your target audience
Getting and selecting ideas
Interaction Design
Visual Design
Validation and iteration

Summary
This chapter is about design process that will help application developers understand how to develop and hone ideas in to successful applications.
Defining your target audience

Research is the only way to accurately define and understand your target audience. Research is fundamental for gathering information and formulating new ideas for your application. There are two main types of research methods you should use in order to achieve better results.

Quantitative research

Quantitative research is gathering data about your target group: demographics, behaviors, habits, and consumption patterns. Analyzing this data will help define where to concentrate your ideation and design efforts. It is usually easy to find data, reports or even in-depth analysis on the web but you have to always pay attention to how this data has been collected and processed otherwise it could be counterproductive.

Qualitative research

Quantitative research is needed but risks becoming useless without a deep understanding of your target group’s experience, expectations or motivations. Qualitative research is about developing a richer and emotional understanding of your target group. It is usually conducted on a smaller scale and involves activities such as direct observation, face-to-face interviews and photographic studies.

Qualitative research doesn’t necessarily take a long time or big budget but requires your direct involvement. Go out and observe your target group, talk with a few of them, try performing the same task by yourself in order to understand what to improve or what to avoid with your design.

In order for research to be useful it needs to be shared among all the members of your team.

Research is fundamental for gathering information and formulating new ideas for your application.

Getting and selecting ideas

Brainstorming

The best way to develop ideas is to run one or multiple brainstorming sessions with your team in order to generate a high number of ideas to evaluate, filter and select later.
Chapter 1 – Five Step Design Process

The ideal size of a brainstorming session is between 5 and 10 people. Bigger groups tend to be dispersive and quickly lose focus on the brainstorming topic. Try to keep the sessions short, 20 or 30 minutes, and ask the team precise questions (based on your research) to answer. It may seem counterintuitive but the best ideas come from precise and narrow questions. The team should focus on finding a solution rather than defining the problem (which should have already been done within the research phase).

In a brainstorming session there are no good or bad ideas. Everyone should be free to generate new ideas or build on previous ones, defer criticism and long discussions to a later phase. Ideas may come in different formats: UI sketches, stories, features description.

Sketching out ideas on paper is a fundamental and quick tool for visualizing and exploring ideas. Sketching may refer to visualizing a specific part of the application UI or the bigger context of using the application. Depending on the type of application you are design you should focus your sketching more on the UI elements or in the scenarios of the application in use. Both are needed to evaluate the ideas.

**Evaluating ideas**

After a brainstorming session spend some time reviewing the ideas, try to create a cluster of similar ideas and then put them to use by inserting them into a story, or a use case scenario. Utilize these stories to foster a discussion between the team members. Form a prioritized checklist of the best use cases and ideas that can be transformed in wireframes and prototypes through the interaction design phase.
Sketching out ideas on paper is a fundamental and quick tool for visualizing and exploring ideas.
Interaction Design

Interaction design is about organizing the features of your application in a logical architecture. Defining the behavior of each element and designing the interaction between the application and the user through every touch point of the experience.

General architecture

First start by designing the general architecture that describes the main navigation and actions of your application.

Figure 1 - wireframes are the blueprint of an application

Happy Flows - Wireframes

At this stage you can start designing the wireframes for the happy flows of your application. This means concentrating the design effort in drawing wireframes for the essential views of your application.

Wireframes are schematic representations of an application’s views. They describe the structural elements of navigation (i.e. content, layout and hierarchy) and functional elements such as behaviors, actions and events.

Keep in mind that wireframes are not representations of the final visual designs but act like blueprints to the application.
Chapter 1 – Five Step Design Process

**Prototype**

Prototypes with different levels of fidelity can range from simple paper prototypes to fully functional simulations. These are fundamental elements of interaction design. Use them early and often in your design process.

**Secondary flows**

When you are satisfied with the main happy flows of your application move on to the secondary flows (i.e. login, help, errors and mistakes, settings) and design wireframes for these views as well.
Visual Design

Finalizing an application contains many elements that need to be designed in the visual aspect / behavior. In this phase you will fine-tune all the elements of your application.

Screen layout

Is about translating the wireframes into the application’s final screens. Grids, white space, colors, typography and images. These elements play a crucial role in making an application easy and pleasant to use. Always keep in mind that the primary goal of visual design is to make things clear, simple and usable. Keep the visual designs as simple and possible without being boring.

UI elements, icons and other assets

You can customize the standard MeeGo UI elements to fit your visual designs. If needed or desired you can built your own components, icons or backgrounds. Always try to harmonize new components with the common MeeGo UI to avoid redesigning something that is already available in the common components library. See the MeeGo Touch UI Guidelines for more details.

Copywriting

Copywriting is an essential part of finalizing an application. Make sure the tone of voice is in line with the visual appearance of your application and consistent throughout all views. When designing the final layouts keep in mind the possibility of localization issues.
Animations and audio (if needed)

When required design and produced all the necessary material for animation and audio feedback together with the proper specifications on how to use it.

*Always keep in mind that the primary goal of visual design is to make things clear, simple and usable.*
Validation and iteration

The application design process is never simple or linear. Rather it takes a number of design iterations until the application reaches a satisfactory level. Validation should happen in every phase of the design process and if there are visible problems you should never continue to the next step until you address them.

Real users

Early wireframes and flows can be reviewed and tested internally but when possible, especially toward the end of the design process, start evaluating your prototypes with real users and try to embed their observations in the design. Introducing and integrating end user testing early can also help to gradually introduce innovative and new design patterns. Having significant shock value on new features can cause users to withdraw from your application usage.

Performances and reliability

How an application is reliable, stable and responsive is part of its user experience. Interaction and visual design are of course important but always remember they quickly lose their value if the application crashes often or doesn’t provide correct information. In the event of crashing, always try to end gracefully and with some kind of end user warning. It would also help support if the crash had some kind of error code or feedback for improvement.
Chapter 2 – Design Principles

Inside
MeeGo UX Principles
General Design Principles

Summary
This chapter describes general principles that are important for understanding how to design and develop outstanding applications for the MeeGo platform.
**MeeGo UX Principles**

**Well defined goals make great Apps**

The faster a person understands your application the more likely they are going to use it. In general, the first screen should inform a user of exactly what the application does and how to use it. Remember also that 80% of an app’s usefulness is determined by 20% of its features.

**Don’t make me think**

Rather than adding the amount of information and complexity, you should aim to minimize and simplify the thinking process. This helps users to make quick and decisive actions in your application. If a person can easily use your application the odds are they’ll use it again and more often.

**Content is king**

Focus on engaging content and minimize the attention required by the user interface. This decreases the user's cognitive burden, and allows them to focus on the experience of your application.

*80% of an app’s usefulness is determined by 20% of its features*

**Minimize the number of touches required to perform an action**

Efficiency is a key for successful applications. Try to minimize the number of steps required to accomplish a task. However keep in mind sometimes breaking the task in to small steps makes it easier to understand.
Integrate your app with the Tablet's UI

The MeeGo Tablet UX supports Panels that help users access information from multiple applications presented in an integrated and coherent manner. But in general you could take advantage of this principle and integrate your application with the MeeGo tablet UX.

Avoid dialog boxes

Dialog boxes are usually interruptions to the user's mental flow. It takes the user away from what they were doing and can break their concentration. Rather than using dialog boxes, great applications present the important information as the user is navigating around the application. Presenting this information can take many forms such as an icon at the top of the application or an error message after a user has selected something. Whichever method you use for presenting information in your application try not to break the thought flow of the user.

Support Multiple Screen Orientations

This guideline should be fairly obvious, but it's worth stating anyways. People pick up their tablets from many different directions. Great applications adapt to their users by presenting the information to them in the correct orientation. This means your application should dynamically and automatically resizes itself correctly.

Reduce Full-Screen Transitions

Full-screen transitions are distracting to the user because it breaks their concentration. Everything that they were thinking about on the previous screen has just been replaced. Unless the amount of information that is being presented on the screen is fairly trivial, replacing the entire screen is often overkill.

Stunning Graphics makes your App Standout

Stunning graphics make your application more enjoyable and original. It also increases the brand awareness of your application. People remember images far better than they remember words or user interface controls. Take advantage of this fact. Think of it this way, could somebody identify your application from across the room?
Ask People to Save Only When Necessary

Great applications save the status of the application and any data that needs to be saved in the background. This way, users don’t have to remember to save. Saving data in the background also helps when your application may crash. When the user returns, it should try to return to its original state.

Start Instantly

The standards for instant on applications are set higher for tablet and smart phones than they are for ordinary laptops and computers. Starting a device instantly makes sure that users' attention doesn’t wander, and that they have a pleasant experience.

Always Be Prepared to Stop

This guideline is the same as the start instantly guideline. The users’ experience is much better when they can switch tasks quickly.

Focus on engaging content and minimize the attention required by the user interface.

General Design Principles

What we see is what we perceive and understand. When designing an application keep in mind some simple rules for aligning the eye and the mind.
Chapter 2 – Design Principles

**Affordances**

The appearance of an object should always contain clues of its behavior and should help the user understand how to use it.

**Hierarchy**

Content and actions should always be laid out with a clear hierarchy based on the purpose of the view and the needs of the user. Different colors, sizes, visual dividers and vertical alignment help define a clear hierarchy in every application view.

**Similarity**

The eye and the mind are always looking for repeating patterns because they are easier to understand and are predictable. Use similarity to group similar objects on the screen and reduce the user’s cognitive effort.

**White space / negative space**

White or negative space (empty space on the screen) are useful for highlighting the legibility of content. It helps the user concentrate on the current task and content. Do not overfill the screen with too many elements and keep the visual design simple and functional. This is particularly important when designing a MeeGo application because the goal of the system is to downplay the OS and the UI elements in favor of content and actions.

**Contrast / variety**

Try to build an application with a clear and strong hierarchy through repeating elements designed with simple visuals and the necessary white/negative space. Use contrast and variety in positioning, color or size to highlight important or new items and content.
Chapter 2 – Design Principles

The eye and the mind are always looking for repeating patterns because they are easier to understand
Chapter 3 – Platform

Inside
MeeGo, a software platform for Ecosystem Development
Tablet Devices
Screen Sizes
Primary Orientation
Terminology

Summary
This chapter touches upon the MeeGo platform, key elements of a MeeGo tablet device and terminology to help developers.
MeeGo, a software platform for Ecosystem Development

In an ideal world software developers would choose one development environment write their application once and re-use in multiple devices and marketplaces to maximize their investments. That is precisely what MeeGo software platform is designed to achieve. MeeGo is a fully open software platform that supports a broad range of computing devices, including next-generation smartphones, netbooks, tablets, media phones, connected TVs and in-vehicle infotainment systems. This coupled with Intel® AppUpSM Developer Program and Intel AppUpSM Center provides an avenue for developers to differentiate and monetize their investments. MeeGo is supported on both Intel® Atom™ and ARM architectures. However, MeeGo running on high-performance devices based on an Intel® Atom™ processor will deliver a visually richer, immersive media, internet and communications experience.

Figure 2 – MeeGo Application development

*MeeGo is a fully open software platform that supports a broad range of computing devices*
**Tablet Devices**

A compelling tablet OS must deliver an intuitive, stellar user experience for the consumer, not only in terms of its aesthetic look and feel, but also in terms of its extensible and compatible applications.

MeeGo OS differentiates itself in two areas - 1) a completely unique user experience that makes the tablet “think like you do” and, 2) an open standards based platform for developing a unfragmented and rich application ecosystem that can be re-used across a product categories, architectures and versions.

![Figure 3 - MeeGo Table UI](image)

For more information on tablet specifications please refer to the [MeeGo Tablet Developer Preview](#).

* MeeGo a completely unique user experience that makes the tablet “think like you do”
Screen Sizes

MeeGo tablet screen sizes are usually 7 to 10 inches. We encourage developers to create apps supporting the popular resolution sizes of 1280 x 800 and 1366 x 768 pixels.

Primary Orientation

The primary orientation for 4-7 inch tablets is portrait, and landscape for 10 inch tablets. MeeGo common components are always provided for both orientations. In other words, by using them, there is no need for extra work. It is advisable, however, that anyone building an application acknowledges such a change, as it might impact the desired experience.
**Terminology**

**Home screen**
The central point of access to all the applications and content on your device - it is the first screen you see when you switch on your device.

**Panel**
Is a UI element on the Home screen which acts as a window or launchpad in to an application. Panels act as entry points to your devices - they surface information to you, for example the Friends panel surfaces feeds from your social network groups, the Video panel surfaces movies and TV content you have been watching.

**Switcher**
The switcher is where the user can view, access and control all the running apps.

**Application**
Software which performs a specific function for the user. An application can vary from a simple single main view showing the weather to a content-intense application such as Music.

**Application UI plug-ins**
Extensions for a given application

**View**
A specific state of an application.

**Toolbar**
A toolbar is part of an application’s main view, which contains navigation buttons.

**View menu**
A View menu is a button that opens a Flyout (popup menu) from the Toolbar.

**Flyout**
A Flyout is a popup menu that access all secondary views within an application.

**UI components**
The building blocks of a UI, such as sliders, text fields, and buttons.
Chapter 4 - What Makes MeeGo Different?

Inside
MeeGo UX Challenge
Anatomy of MeeGo UX
Implications for Application Design

Summary
This chapter defines differences in the MeeGo User Experience, which will help developers understand how to develop applications for a MeeGo tablet.
Chapter 4 - What Makes MeeGo Different?

**MeeGo UX Challenge**

MeeGo offers a new tablet user experience with a direct focus on the content produced and consumed by the user on their devices. The table should “think like you do”.

The now-ubiquitous grid of applications puts the application before the content and the task the user wants to perform. Want to check the flight departure time in the mail? Search and launch the specific application. Need some music? Launch another app and browse for the tracks you want.

This approach describes a strict pattern:

```
Home Screen  Launch Application  Application Main View  Desired Content/Task
```

Certain activities, like playing a game, naturally follow this pattern but on many other occasions content and people appear to be more relevant in our daily lives. MeeGo’s UX challenge is about introducing a new pattern based on them:

```
Home Screen  Adaptive Content  Desired Task  App To Perform Task
```

MeeGo downplays the role of the application grid (without eliminating it) and is in favor of a content-based adaptive UI. This choice acknowledges the importance of multitasking in mobile applications development.

Figure 4 - This video is a good example of the MeeGo UX. [http://youtu.be/sPyHIrKtc](http://youtu.be/sPyHIrKtc)
Chapter 4 - What Makes MeeGo Different?

**Anatomy of MeeGo UX**

A MeeGo device home screen presents the user with their most relevant content within several Panels. Each Panel collects and presents updates, favorites or recently used items and activities surrounding the user’s friends, photos, music, videos, etc… In this way Panels act as entry points to applications. From Panels the user can quickly access a specific item without having to go through the app’s main view.

The classic apps launcher is still available and accessible from the home screen as well as the task switcher where the user can view, access and control all the running applications.

Figure 5 - Anatomy of MeeGo Tablet UX

The architecture of the MeeGo UX is focused on multitasking and applications, which have two main entry points: either through a specific item in a Panel or through the app launcher.
Chapter 4 - What Makes MeeGo Different?

Users often quickly switch between applications and expect them to follow the same content-centric approach with Panels. So don’t think of your application as a detached experience captivating all of the user’s attention. Try to merge your application with the panels multitask flow by focusing on fresh and relevant content and minimizing the UI.

Figure 6 - Panels on a MeeGo tablet home screen

Figure 7 – Switcher on a MeeGo tablet
Chapter 4 - What Makes MeeGo Different?

Implications for Application Design

These MeeGo UX principles and core UI elements define some important implications for the app design process. Panels focus on adaptive and relevant content. Users can move quickly between applications always finding personal content at their fingertips.

The MeeGo app navigation framework is mainly focused on the app’s main view. Developers are advised to design content for the main view since this is where users will spend the vast majority of their time in an application.

Flyouts and Object Menus remove all redundant actions in an effort to create a simple and invisible UI that focuses on the content and its direct manipulation.

*MeeGo Panels focus on adaptive and relevant content for the user.*
Chapter 5 - Application Layout

Inside
Application Screen Layout
Basic Application Navigation
Views Menu & Flyout
Objects Menu
Toolbar
Search Bar
Full Screen Mode
List and Grid Views
Orientation
Resizing and Scaling
Task vs Discovery Orientated Application Layouts

Summary
This chapter describes the basic application screen layout and will guide developers to consider various elements for building a MeeGo application.
Application Screen Layout

A MeeGo application may appear in many forms and layouts but most views follow this basic structure.

**Status Bar**
Provides overall system status such as time, battery life etc. This is visible at all times and in all applications unless you are in full screen mode.

**Toolbar**
Every application MUST contain a Toolbar, which acts as a main navigation menu for the application.

**Content View**
This is where your application happens. All the application content will be displayed in this area.

**Actions Bar**
is used for controlling specific actions or elements within the Content View area. (Optional)

Figure 8 - MeeGo application screen layout
Basic Application Navigation

Application navigation in MeeGo differs significantly from other platforms because access to the application’s secondary views is presented under a Views Menu. When a user selects the Views Menu in the application’s Toolbar a Flyout appears with a list of all the available secondary views for the application.

Views Menu & Flyout

Figure 9 - how to navigate through different application views

From a UX and design perspective this means that main and secondary views will be perceived as living in two different layers with the latter being always less visible.
Objects Menu

An Object Menu is a visual overlay connected to a selected item that lists all the available actions for it. The Object Menu is needed when more than one action is available for an item.

![Object Menu]

The user opens the menu with a long press and then slides his finger over the list to select an action.

Figure 10 - Object menu

Figures

Gestures

![Gestures]

LONG PRESS

DRAG

Figure 11 - A long press then drag gesture opens the Objects Menu
Chapter 5 - Application Layout

**Toolbar**

*Appearance & Function*

A Toolbar contains controls that perform commands related to the application’s Main view screen. The Toolbar sits above the Main View of an application. Every application must contain a Toolbar.

**Application – Toolbar**

The Toolbar contains a back button, View label, View Menu and the Action menu.

---

**GUIDELINES**

**Toolbar**

Use a Toolbar to allow users to access your application’s core commands when needed.

**Back button**

The back button only appears in the secondary views of the application. The back button navigates back in the secondary views only.

**View label**

The view label is the screen/page title of each section of the application.

**View Menu – application navigation**

Use the Views Menu to open a Flyout with a list of all other views available for an application. This allows for many navigational options.

**Action Menu**

Use the Action Menu to list the general actions of your application. A general action does not affect a single item.
GUIDELINES

Flyout – application navigation
A Flyout is an overlay that appears on the screen in consequence of pressing the Views menu button. Only one Flyout can be visible at a time, which is always visually connected to the button that spawned it. When the user selects the Views Menu in the Toolbar a Flyout appears with the list of all the available secondary views of the app.

LANDSCAPE VIEW MODE – Toolbar orientation
In landscape view mode, the Toolbar sits at the top, together with the title bar. Even though either icons or labels can be used (but not both at the same time). Icons are recommended due to localization issues.
Search Bar

Appearance & Function

The search bar is normally not visible and can be accessed by dragging down on the application Toolbar. Tapping in the search window will activate the keyboard from the bottom of the screen to begin the search query. Search queries are instant and results appear whilst you are typing. Autocomplete results may pop up in the input form too.

Search Bar – Pull Down

1. Pull down action on Toolbar

![Image of pull down action on Toolbar]

The virtual keyboard is invoked automatically when an input field is in focus (that is when the user taps an input field). If the user rotates the device, the layout is smoothly changed according to the new orientation.

2. Search Bar slides down above Toolbar

![Image of search bar sliding down above toolbar]

3. Taping on input field opens keyboard

![Image of keyboard opening on tapping input field]
**GUIDELINES**

**Be ready for search**
Search needs to be as responsive as the rest of the application. Make sure to prepare the content index before the user invokes a search. The full content index appears as soon as the Search Bar becomes visible and then is filtered with the input from the user. If you start building the index after the search call this could cause an unpleasant delay.

**Organize your content indexes**
When possible sort the search content in a meaningful way according to your application (time, alphabetical order, distance, price, etc).

The search component must always and only appear above the application toolbar.
Full Screen Mode

For applications that need to provide a more immersive experience, Full Screen Mode is available. It is important, however, to always provide a way out of the application (and to offer application navigation when appropriate). Full Screen can be presented in two different ways:

Figure 12- MeeGo Video player – Tap to access Full Screen mode

Controls a tap away
All controls (Title Bar, Status, extra controls, etc) are removed, presenting only the maximized content. Controls are made visible by tapping the screen. This is especially useful for media-related experiences.

Figure 13 – Offer Exit controls in applications using Full Screen Mode

Embedding Exit in Application Content
In a few specific cases, like games, a more immersive experience might be desired. It is only possible to remove the persistent navigation out of the application if you design an easy to access exit command that is available for users.
Chapter 5 - Application Layout

List view

A List view is a list of items on an application screen. In most cases Lists are used for displaying categories or genres relating to an application. Lists are probably the most common UI layout, and have a particular behavior depending on the orientation. If you have an undefined number of items to be shown in the UI, consider using a list.

Long Lists
The number of items in a list can change while the list is being displayed. If there are more items than what fits the current view, the list automatically becomes scrollable. A list occupies the full width of the area in which it is being displayed.

List dividers help break up the long list of content. These dividers can be used to help speed up the user experience when searching for something in a long list.

Figure 14 - Tap once to select a list item

Figure 15 - dividers makes lists easier to read
1 vs. 2 Columns

Some applications may consider splitting lists into two columns, when in landscape, to optimize space usage. This may be used when there is no hierarchical order, usually in first level drill down pages. However, this should never be done when the list follows a specific order criteria (such as chronological, alphabetical, etc).

List & Content View

In your application you could offer both list and content views on the same screen. This would work well for applications like email or in a media playlist where you have both views together.

Figure 16 – 2 column content layout in an application.
Grid views

A Grid View consists of rows of equally sized items. These can have labels if needed. Tiled Galleries can be used to display large numbers of items. Good places for this component to be used are photo albums, video galleries and applications that require visual elements.

When creating an application one of the most important things to get right is the layout, the UI is crucial to conveying this. If the user feels that the layout is haphazard or poorly thought out they will lose confidence with the design.

Grids are utilised as a structural foundation for a design, that can enhance the overall look and feel by allowing you to create a stronger layout for your elements. Grids for MeeGo must always be fluid so that they adapt to different environments and space.
GUIDELINES

Safe-areas
These provide a ‘buffer’ space between UI elements, content and the physical screen. These are not specific distances, but rather visual approximations.

Content alignment / spacing
Content should be distributed according to the item size and available space, whilst considering the need for safe-areas, target size, and clean space around items.

Touch target size -
MeeGo recommends:
• A touch target size of 9mm
• A minimum touch target size of 7mm
• A minimum spacing between elements of 2mm
• The visual size of a UI control to be 60-100% of the touch target size
Orientation

Portrait vs. Landscape

Device orientation suits multiple applications in different ways. While watching a video is best in landscape, with the media taking up all the screen, scrolling long lists is more comfortable in portrait.

MeeGo common components are always provided for both orientations. In other words, by using them, there is no need for extra work. It is advisable, however, that anyone building an application acknowledges such a change, as it might impact the desired experience.

GUIDELINES

Applications must fit both orientation modes
It is recommended that all application provide both portrait and landscape mode. The main reason is the form factor of MeeGo devices. The user shouldn’t be forced to change orientation to complete a task. Playing a game is one of the few exceptions to this rule.

Use of space
Assets can be subtly resized and/or reshuffled to make better use of the screen real estate after changing the orientation.
Chapter 5 - Application Layout

**Resizing and Scaling**

When designing for variable screen sizes or re-purposing content, it is essential to be aware of the following:

- All functional toolbars are UI fixed height elements and as such should only be resized horizontally.
- Safe areas are indicators only, be careful of not attempting to ‘squeeze’ the same amount of content into a smaller space.
- Reordering and redistribution of content items provides the most effective way of resizing.

![Tablet screen sizes](image-url)

*Figure 18 - Tablet screen sizes are 10", 7" and 4". Resolution is 1280x800 pixels*
Chapter 5 - Application Layout

Task vs Discovery Orientated Application Layouts

How you organize and present your application content will have a major impact on the user experience. While a list presenting content may be suitable for a task, other formats might be more engaging for other kinds of applications.

**Task Orientated Layout**

The best solution is to refer to your users needs. For example, if a user opens your application with a precise goal in mind (let’s say checking email or finding a store on a map). In this case your main view layout should be designed starting with the tools needed to perform a task.

**Discovery Orientated - Cover View**

On the other hand if users open your application without a defined task (like a music, app store or an ebook reader) then you need to design a layout for the main view area that is focused on content discovery; Thinking of the main view like a cover to a magazine.
Chapter 6 – MeeGo Common Behaviors

Inside
Greetings
Focus
Multiselect
Actions Ordering

Summary
This chapter focuses on the MeeGo Common Behavior usage guidelines for application design.
## Gestures

The following gestures are used on MeeGo tablets.

<table>
<thead>
<tr>
<th>Gesture / Name</th>
<th>Actions</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAP</td>
<td>Press, Release</td>
<td>Open items/Select buttons/links</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Insert cursor (in text field), Reveal hidden controls, Stop kinetic scrolling</td>
</tr>
<tr>
<td>LONG PRESS</td>
<td>Press, Wait</td>
<td>Reveal object menu</td>
</tr>
<tr>
<td>DOUBLE TAP</td>
<td>2 * Press Release</td>
<td>Reserved for future use</td>
</tr>
<tr>
<td>DRAG</td>
<td>Press, Drag, Stop</td>
<td>Pan/Scroll content (also bring in new content, e.g. Gallery, switching to next picture) Paint to select text (in text field)</td>
</tr>
<tr>
<td>PINCH</td>
<td>Press, Release</td>
<td>Zoom in/out (points touched on screen follow fingers)</td>
</tr>
<tr>
<td>2 FINGER TAP</td>
<td>Press, Wait, Release</td>
<td>Select text (non-editable text fields)</td>
</tr>
</tbody>
</table>

If you are in need of further information on Gestures please view the [MeeGo Touch UI Component Guidelines](#).
Focus

Focus brings attention to a specific task that needs to be accomplished on the screen. Since MeeGo is designed for touch interfaces where any part of the screen could be active, focus is used sparingly or for very specific cases.

However, there are a few examples that focus is used.

Search / Text entry
The MeeGo Search bar and Text entry creates focus on the task at hand.

Flyout menus
Flyouts implicitly create focus since they’re closed if the user taps away.

Popup overlays
Popup overlay notifications where users must decide on actions also create focus to a specific task.

Figure 19 - focus usage examples
Chapter 6 – MeeGo Common Behaviors

**Multiselect**

Multiselect is the function of selecting multiple items from a group of objects. If you wish you can allow objects to have multiselect modes. This will change the view, so you can add or remove the UI for this mode.

If multiple select was entered from an object menu then the selected item will be enabled.

The user toggles the selection state of items with a tap. Visual indicators are required to distinguish between the two states.

- Non selected item
- Selected item

![Figure 20 - multiselect modes in MeeGo](image-url)
**Actions Ordering**

Action ordering is used in specific cases when one choice between several options needs to be made. If actions are grouped together then they should be ordered with positive actions on the left and negative actions on the right with the most important actions on either edge.

In a vertical arrangement left to right should be replaced by top to bottom.

You can also refer to the usage of buttons in Chapter 6 – MeeGo Common Components.

![Action ordering popups](image)
Chapter 7 – MeeGo Common Components

Inside
Media Tiles
Buttons
Headers and dividers
Progress Bar
Dropdown Bar
Sliders
Content Reveal Bars
Letterbar
Popup overlay

Summary
This chapter features the MeeGo common components usage guidelines for application design.
Media Tiles

Appearance & Function

Media tiles are special tiles used to display multimedia content. These tiles contain an action button that triggers two actions depending on the selection from the user.

The action button can also be used to pause the playback of an audio track from the grid view.

GUIDELINES

Use media tiles only when there is more information available for the content of the tile

Media tiles are supposed to help the user in controlling basic actions of an item without leaving the current view but become unnecessary in absence of a further navigation layer. If there is no need for extra information opt for a simple tile.

Clearly indicate the related action

Use an appropriate icon for the action button in the media to make sure the user quickly understand what will happen next.

Buttons

Appearance & Function

Buttons contain either icons, texts, or both. There are three main categories of buttons you can use in your application:
Normal buttons

This is the default option for all the common actions a user can perform within an application.

Choice distinction buttons

These buttons have a specific visual appearance and are used when there is need for a clear and obvious choice to be made between a variable number of options.
How to layout the available options
When there are two options available always put the preferred options on the left (or in the top position in a vertical layout).

When there are three or more options always order them with positive actions on the left and negative actions on the right (or positive on top and negative at the end of a vertical view).

Keep colors consistent and meaningful
Always use logical colors to visually highlighting preferred, positive or negative button options.
Toggle buttons

Use these buttons when the user can switch between two different and opposite states. Use them for the main settings of your application that affect the whole experience (i.e. turning data connection on/off).

![Toggle buttons example](image)

Figure 24 - Toggle buttons

Checkboxes

Checkboxes are a subcategory of toggle buttons suitable for smaller settings for an application. Reserve them for the secondary preferences of your application.

![Checkboxes example](image)

Figure 25 - Checkboxes

Radio Buttons

Radio buttons work like checkboxes but are useful when you need to specify both options to the user in order to avoid misunderstanding. Once again use them for the fine settings of your application.

![Radio buttons example](image)

Figure 26 - Radio buttons
GUIDELINES

Use the platform buttons style
In order to improve the consistency of the experience try to use the default platform buttons as much as you can, as well as the platform common icons. Design new icons only when you need to indicate unconventional or application specific actions. When designing new icons make sure they are not similar to the system default ones in order to avoid misunderstanding.

4 button states
It is good practice to always plan and design a button’s visual appearance with four states: inactive, active, selected and activated in order to be able to provide the right visual feedback about a button’s current state.

Feedback
Sometimes it is good to provide extra feedback of the action connected to a button. Feedback could be visual, audible or tactile and aside from providing confirmation of the user’s input it rewards him, add emotional value to the experience. Do not overuse extra feedback and reserve it only for the most critical actions in your application.
Chapter 7– MeeGo Common Components

**Headers and dividers**

**Appearance & Function**

Dividers and headers are primarily a visual element but they play an important role in enhancing the user experience of an application because they are visually grouped and set order to information.

Other components such as buttons can be placed inside a header and are always right aligned.

**GUIDELINES**

**Always prioritize contextually**

Always make sure that dividers help the user in finding the most relevant content according to the context.

*Figure 27 - Headers and dividers*
Progress Bar

**Appearance & Function**

A progress bar shows the current state of a task. Use it to provide feedback to the user that the application is performing the required task, or when the task requires more than 10 seconds to complete and when the required time can be predicted and calculated.

![MeeGo progress bar](image)

Figure 28 - MeeGo progress bar

A progress bar can also be paired with an optional text string (i.e. to say “3 minutes to go”) and one or more buttons with optional actions for the user.
Dropdown Bar

Appearance & Function
A dropdown Bar is used when the user needs to select an item from a list in a minimal space. When closed the dropdown bar displays the current selection, when selected it triggers a flyout with a list of items.

GUIDELINES
Do the right thing first
Use the Dropdown bar not only to simplify the layout of the application but also to provide the user with the common and preferred options already selected, so that most users won’t need to open the dropdown bar at all.
Sliders

Appearance & Function

Sliders are used to display and modify continuous values and are displayed vertically or horizontally. The user can set the slider either with a tap and drag or with a single tap.

Sliders can also have a text label indicating the value and some icons or text at both ends to assist the user in understanding the value and its direction.

Figure 29 - Slider

GUIDELINES

In a slider the lowest value is always on the left (bottom in vertical layout) and the highest value is on the right (Top).
Content Reveal Bars

Appearance & Function
Content Reveal Bars are headers that can collapse or expand to show its content. You can set the default state of a content reveal bar and since each bar works independently from the other there is no limit to the number of expanded bars that can be displayed in a list.

Content reveal bars can contain other components but it is suggested not to put more than one component in a bar.

Figure 30 - MeeGo reveal bars
Letterbar

Appearance & Function
The Letterbar is always used within the Action Bar at the bottom of the screen and filters the content alphabetically from the list above it. The Letterbar responds to a single tap on a specific letter or to a drag gesture.
Chapter 7 – MeeGo Common Components

Popup overlay

Appearance & Function

A popup overlay can be used by applications for modal dialogues. Popup overlays cannot be closed when the user taps outside the screen, the user is forced to interact with it. The screen also dims behind the popup and no other interaction is allowed with the application.

GUIDELINES

Two are better than one
Popups should always contain at least one button to close it but it is preferable to have two actions in order to provide the user with a choice. If there is no need for two buttons then you should investigate if the popup is really necessary since it will only give information to the user without offering any possibility of taking action for it.

Use them carefully
Popups should be used only when there is real need for attention or input from the user. It’s okay to use them when critical information is needed or when the user has to complete short and focused tasks. They are not to be used for merely improving visibility or to catch the user’s attention.

Keep them short and simple
Title messages and actions have to be short and clear. Avoid putting too much text inside a popup or more than two input forms. If content, inputs or actions are too long than opt for a new view inside your application.
Conclusion

MeeGo is a completely unique user experience that makes the tablet “think like you do”.

This document was created to present the MeeGo tablet UX in a simple and visual manner. The first two chapters help define the basic application design guidelines, which help developers sharpen ideas for creating apps. The MeeGo user experience guidelines clarify the overall MeeGo UX and UI elements so that application developers can build their application designs correctly. Chapters six and seven highlight MeeGo behaviors and components, which make up the core elements of the MeeGo UI structure. This document will change and be updated as MeeGo evolves.
For Your Reference

There is a wealth of information on various MeeGo UX and UI elements for application development. Below are reference files and documents that will help you on your way to creating the best app for MeeGo.

**MeeGo Tablet Developer Preview**
https://www.meego.com/downloads/releases/1.2/meego-tablet-developer-preview

**MeeGo UX Components**
http://meego.gitorious.org/meego-ux/meego-ux-components

**MeeGo UX Components Wiki**
http://wiki.meego.com/MeeGo_UX_Components

**MeeGo UI Guidelines**
http://meego.com/sites/all/files/users/admin/meego_touch_ui_v1.2.pdf

**MeeGo Video: The New Tablet Experience**
http://youtu.be/-sPyHITrKlc