

Jawaban Soal Ujian Tengah Semester Ganjil 2023/2024

NIM : 211402002
Nama : Kezia Natalia
Mata Kuliah : Pemrograman Mobile
Link Github : https://github.com/keyynatwgm/002_sunflower.git

1. Clone Repository

```
MINGW64:/e/semester 5/PM/uts/002_sunflower/sunflower

Yoyada@Yoyada MINGW64 /e/semester 5/PM/uts/002_sunflower
$ git clone https://github.com/android/sunflower.git
Cloning into 'sunflower'...
remote: Enumerating objects: 7006, done.
remote: Counting objects: 100% (819/819), done.
remote: Compressing objects: 100% (374/374), done.
remote: Total 7006 (delta 354), reused 611 (delta 215), pack-reused 6187
Receiving objects: 100% (7006/7006), 11.04 MiB | 309.00 KiB/s, done.
Resolving deltas: 100% (3250/3250), done.
```

2. Mengubah remote url ke repository https://github.com/keyynatwgm/002_sunflower.git dengan perintah *git remote set-url origin* dan mengecek perubahan dengan perintah *git remote -v*

```
MINGW64:/e/semester 5/PM/uts/002_sunflower/sunflower

Yoyada@Yoyada MINGW64 /e/semester 5/PM/uts/002_sunflower
$ git clone https://github.com/android/sunflower.git
Cloning into 'sunflower'...
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remote: Total 7006 (delta 354), reused 611 (delta 215), pack-reused 6187
Receiving objects: 100% (7006/7006), 11.04 MiB | 309.00 KiB/s, done.
Resolving deltas: 100% (3250/3250), done.

Yoyada@Yoyada MINGW64 /e/semester 5/PM/uts/002_sunflower
$ cd sunflower/

Yoyada@Yoyada MINGW64 /e/semester 5/PM/uts/002_sunflower/sunflower (main)
$ git remote -v
origin https://github.com/android/sunflower.git (fetch)
origin https://github.com/android/sunflower.git (push)

Yoyada@Yoyada MINGW64 /e/semester 5/PM/uts/002_sunflower/sunflower (main)
$ git remote set-url origin https://github.com/keyynatwgm/002_sunflower.git

Yoyada@Yoyada MINGW64 /e/semester 5/PM/uts/002_sunflower/sunflower (main)
$ git remote -v
origin https://github.com/keyynatwgm/002_sunflower.git (fetch)
origin https://github.com/keyynatwgm/002_sunflower.git (push)

Yoyada@Yoyada MINGW64 /e/semester 5/PM/uts/002_sunflower/sunflower (main)
$
```

3. Melakukan modifikasi file

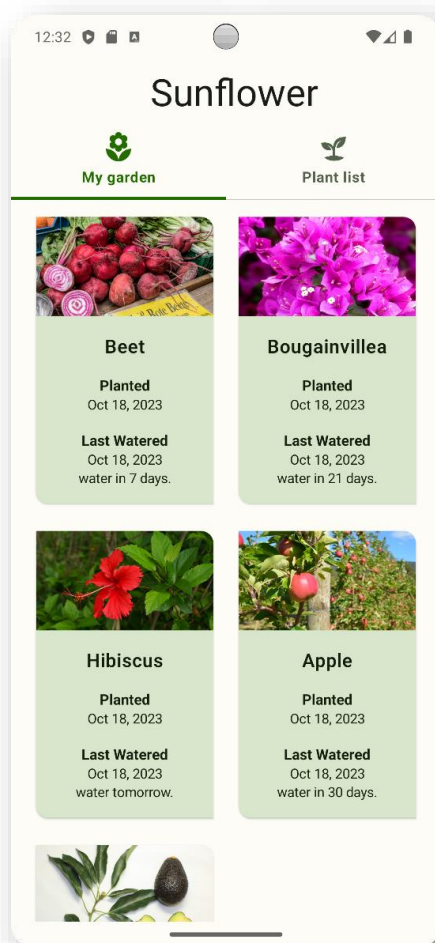
a. **Modifikasi 1** : Mengubah Judul Aplikasi dari Sunflower menjadi "Taman Bunga"

File yang diubah : app/src/main/res/values/strings.xml

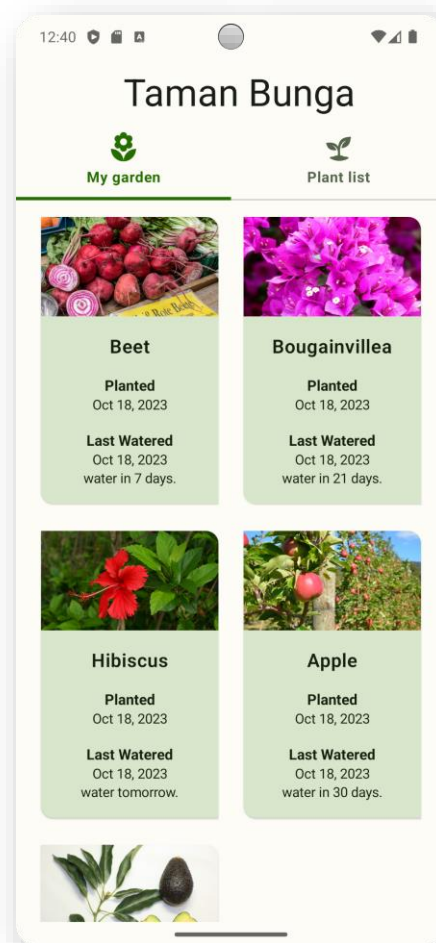
Kode yang diubah :

```
app/src/main/res/values/strings.xml
17 <resources>
18 <!-- Resources that do not require translation -->
19 <string name="app_name" translatable="false">Sunflower</string>
20 -
21 <!-- Translatable resources -->
22 <string name="menu_filter_by_grow_zone" translation_description="The label for the menu item
23 to filter the displayed plants by grow zone.">Filter by grow zone</string>
24
25 <resources>
26 <!-- Resources that do not require translation -->
27 <string name="app_name" translatable="false">Taman Bunga</string>
28 +
29 <!-- Translatable resources -->
30 <string name="menu_filter_by_grow_zone" translation_description="The label for the menu item
31 to filter the displayed plants by grow zone.">Filter by grow zone</string>
32
```

Tampilan Sebelum :



Tampilan Sesudah :



b. **Modifikasi 2** : Mengubah tampilan MyGarden menjadi Scrollable Horizontal List dengan 3 Kolom

File yang diubah :

- app/src/main/java/com/google/samples/apps/sunflower/compose/garden/GardenScreen.kt
- app/src/main/res/values/dimens.xml

Kode yang diubah :

- Pada file GardenScreen.kt

```
app/src/main/java/com/google/samples/apps/sunflower/compose/garden/GardenScreen.kt

@@ -24,7 +24,9 @@ import androidx.compose.foundation.layout.PaddingValues
24 import androidx.compose.foundation.layout.fillMaxWidth
25 import androidx.compose.foundation.layout.height
26 import androidx.compose.foundation.layout.padding
27 import androidx.compose.foundation.lazy.grid.GridCells
28 import androidx.compose.foundation.lazy.grid.LazyVerticalGrid
29 import androidx.compose.foundation.lazy.grid.items
30 import androidx.compose.foundation.lazy.grid.rememberLazyGridState

@@ -96,8 +98,8 @@ private fun GardenList()
96 // Call reportFullyDrawn when the garden list has been rendered
97 val gridState = rememberLazyGridState()
98 ReportDrawnWhen { gridState.layoutInfo.totalItemCount > 0 }
99 - LazyVerticalGrid(
100 -     columns = GridCells.Fixed(2),
101     modifier,
102     state = gridState,
103     contentPadding = PaddingValues(
104
105 // Call reportFullyDrawn when the garden list has been rendered
106 val gridState = rememberLazyGridState()
107 ReportDrawnWhen { gridState.layoutInfo.totalItemCount > 0 }
108 + LazyHorizontalGrid(
109 +     rows = GridCells.Fixed(1),
110     modifier,
111     state = gridState,
112     contentPadding = PaddingValues(

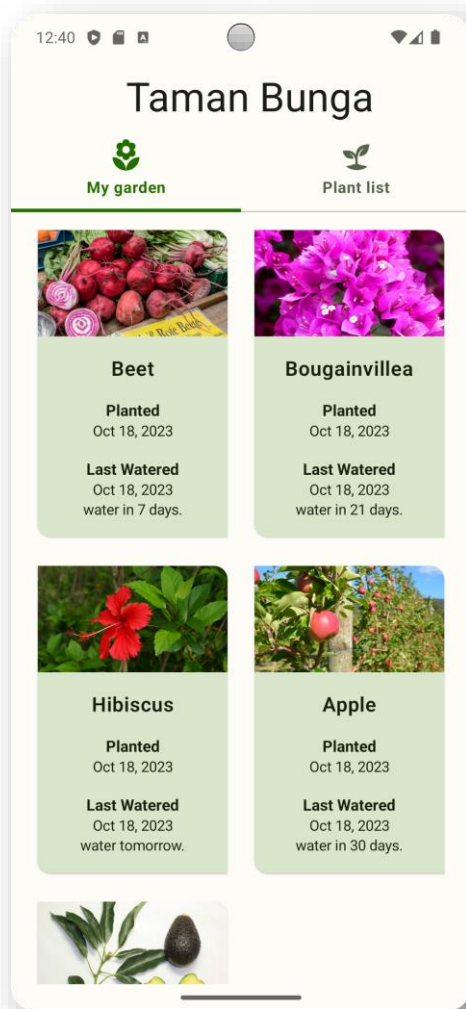
@@ -130,13 +132,19 @@ private fun GardenListItem()
130 ElevatedCard(
131     onClick = { onPlantClick(plant) },
132     modifier = Modifier.padding(
133 -     start = cardSideMargin,
134 -     end = cardSideMargin,
135 -     bottom = dimensionResource(id = R.dimen.card_bottom_margin)
136 - ),
137 - colors = CardDefaults.cardColors(containerColor =
138 -     MaterialTheme.colorScheme.secondaryContainer)
139 - ) {
140     Column(Modifier.fillMaxWidth()) {
141         SunflowerImage(
142             model = vm.imageUrl,
143
144 ElevatedCard(
145     onClick = { onPlantClick(plant) },
146     modifier = Modifier
147     .size(
148         width = dimensionResource(id = R.dimen.card_width),
149         height = dimensionResource(id = R.dimen.card_height)
150     )
151     .padding(
152         start = cardSideMargin,
153         end = cardSideMargin,
154         bottom = dimensionResource(id =
155             R.dimen.card_bottom_margin_garden)
156     ),
157     colors = CardDefaults.cardColors(containerColor =
158         MaterialTheme.colorScheme.secondaryContainer),
159     ) {
160         Column(Modifier.fillMaxWidth()) {
161             SunflowerImage(
162                 model = vm.imageUrl,
```

- Pada file dimens.xml

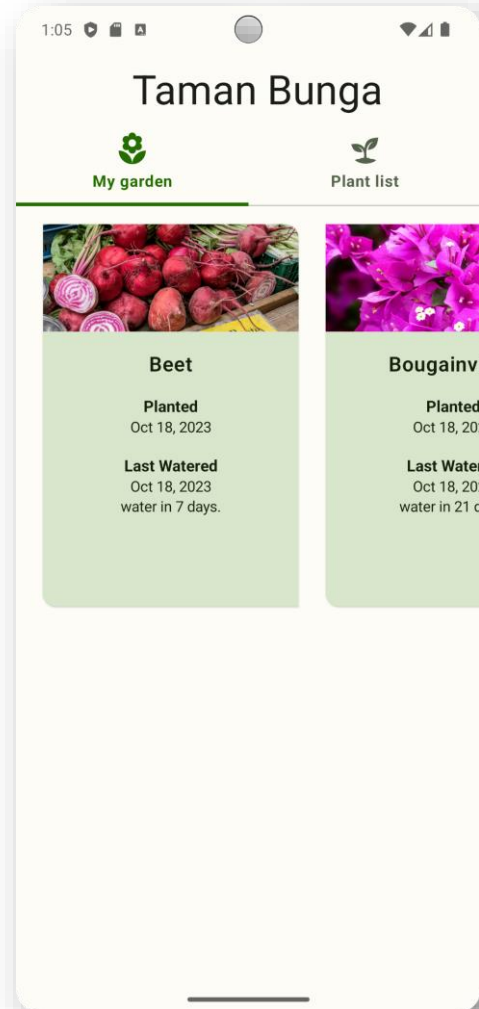
```
app/src/main/res/values/dimens.xml

@@ -36,8 +36,11 @@
36
37 <dimen name="card_side_margin">12dp</dimen>
38 <dimen name="card_bottom_margin">26dp</dimen>
39 + <dimen name="card_bottom_margin_garden">320dp</dimen>
40 <dimen name="card_elevation">2dp</dimen>
41 <dimen name="card_corner_radius">12dp</dimen>
42 + <dimen name="card_width">250dp</dimen>
43 + <dimen name="card_height">36dp</dimen>
44
45 <!-- elevation for Plant Detail toolbar - used to convert to pixels
46 when hiding/showing -->
47 <dimen name="toolbar_elevation">5dp</dimen>
```

Tampilan Sebelum :



Tampilan Sesudah :



c. **Modifikasi 3** : Mengubah tampilan Card menjadi full rounded dengan ukuran 32dp

File yang diubah :

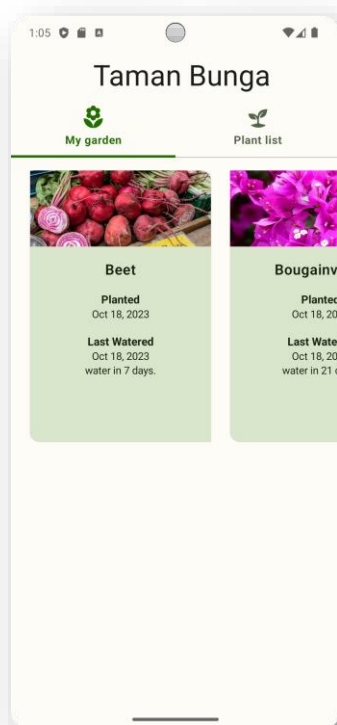
app/src/main/java/com/google/samples/apps/sunflower/ui/Shapes.kt

Kode yang diubah :

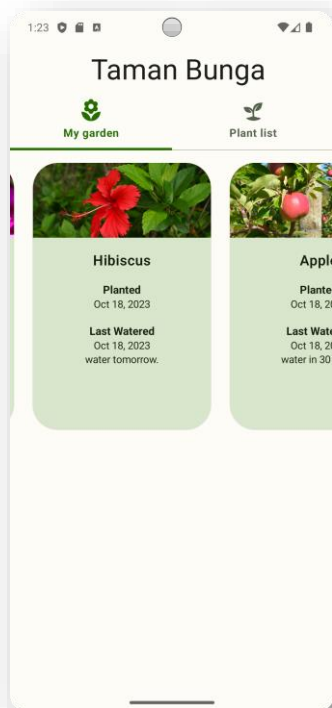
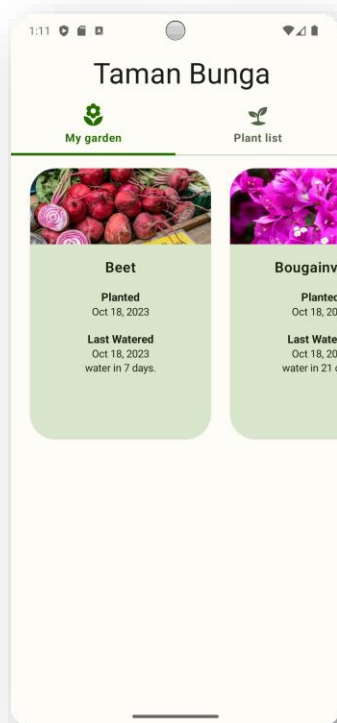
```
16  app/src/main/java/com/google/samples/apps/sunflower/ui/Shapes.kt
22  @@ -22,15 +22,15 @@ import androidx.compose.ui.unit.dp
23  val Shapes = Shapes(
24  -    small = RoundedCornerShape(
25  -        topStart = 0.dp,
26  -        topEnd = 32.dp,
27  -        bottomStart = 32.dp,
28  -        bottomEnd = 0.dp
29  -    ),
30  -    medium = RoundedCornerShape(
31  -        topStart = 0.dp,
32  -        topEnd = 32.dp,
33  -        bottomStart = 32.dp,
34  -        bottomEnd = 0.dp
35  -    )
36  )

22  val Shapes = Shapes(
23  -    small = RoundedCornerShape(
24  +        topStart = 32.dp,
25  +        topEnd = 32.dp,
26  +        bottomStart = 32.dp,
27  +        bottomEnd = 32.dp
28  +    ),
29  -    medium = RoundedCornerShape(
30  +        topStart = 32.dp,
31  +        topEnd = 32.dp,
32  +        bottomStart = 32.dp,
33  +        bottomEnd = 32.dp
34  +    )
35  -    )
36  )
```

Tampilan Sebelum :



Tampilan Sesudah :



d. Modifikasi 4 : Mengubah Color Pallete / Theme aplikasi sesuai dengan preferensi masing-masing

File yang diubah : app/src/main/java/com/google/samples/apps/sunflower/ui/Color.kt

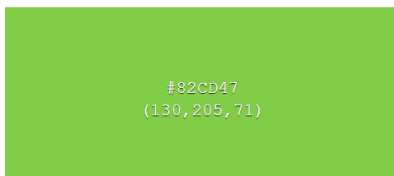
Kode yang diubah :

- Mengubah warna card container (secondary container)

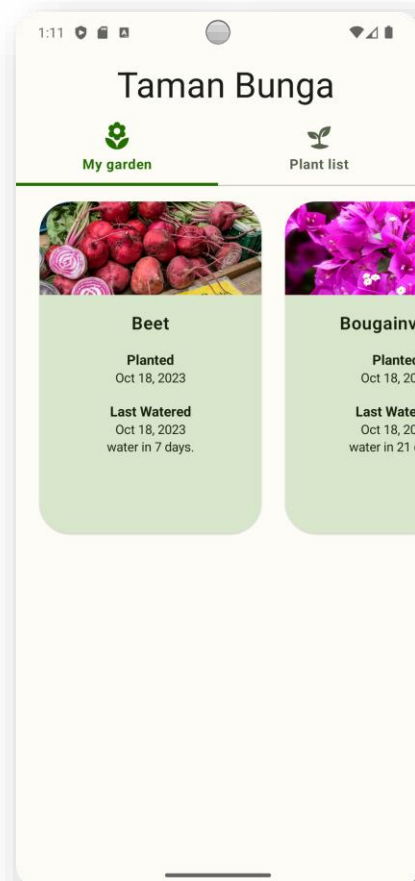
```
27 - val md_theme_light_secondaryContainer = Color(0xFFD8E7CB)      27 + val md_theme_light_secondaryContainer = Color(0xFF82CD47)
28 val md_theme_light_onSecondaryContainer = Color(0xFF131F80)      28 val md_theme_light_onSecondaryContainer = Color(0xFF131F80)
29 val md_theme_light_tertiary = Color(0xFF386667)                 29 val md_theme_light_tertiary = Color(0xFF386667)
30 val md_theme_light_onTertiary = Color(0xFFFFFFFF)                30 val md_theme_light_onTertiary = Color(0xFFFFFFFF)

56 val md_theme_dark_secondary = Color(0xFFBCC8B8)                56 val md_theme_dark_secondary = Color(0xFFBCC8B8)
57 val md_theme_dark_onSecondary = Color(0xFF273421)                57 val md_theme_dark_onSecondary = Color(0xFF273421)
58 val md_theme_dark_secondaryContainer = Color(0xFF3E4A36)         58 val md_theme_dark_secondaryContainer = Color(0xFF3E4A36)
59 - val md_theme_dark_onSecondaryContainer = Color(0xFFD8E7CB)     59 + val md_theme_dark_onSecondaryContainer = Color(0xFF82CD47)
60 val md_theme_dark_tertiary = Color(0xFFA0CFD8)                  60 val md_theme_dark_tertiary = Color(0xFFA0CFD8)
61 val md_theme_dark_onTertiary = Color(0xFF003738)                 61 val md_theme_dark_onTertiary = Color(0xFF003738)
62 val md_theme_dark_tertiaryContainer = Color(0xFF1E4E4F)          62 val md_theme_dark_tertiaryContainer = Color(0xFF1E4E4F)
```

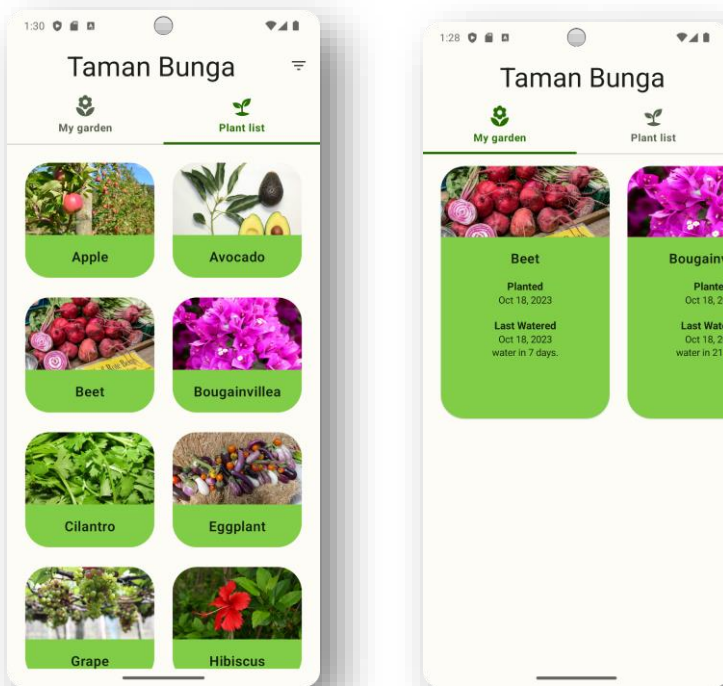
Kode warna yang digunakan : 82CD47



Tampilan Sebelum mengubah warna container :



Tampilan Sesudah mengubah warna container :



Kode yang diubah :

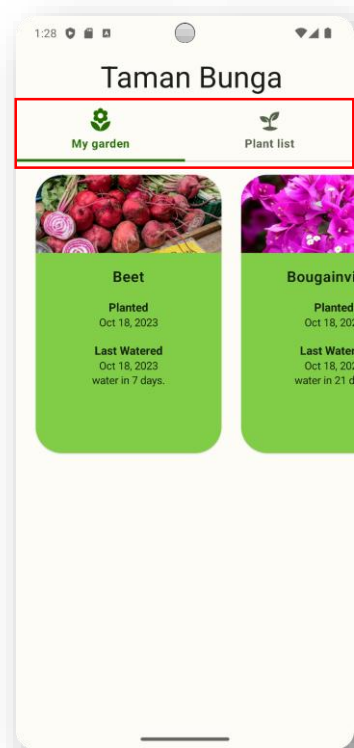
- Mengubah warna navbar (primary, surfaceTint, inversePrimary)

```
@@ -18,13 +18,13 @@ package com.google.samples.apps.sunflower.ui
18
19 import androidx.compose.ui.graphics.Color
20
21 - val md_theme_light_primary = Color(0xFF246000)
22 val md_theme_light_onPrimary = Color(0xFFFFFFFF)
23 val md_theme_light_primaryContainer = Color(0xFFA6F700)
24 val md_theme_light_onPrimaryContainer = Color(0xFF062100)
25 val md_theme_light_secondary = Color(0xFF55624C)
26 val md_theme_light_onSecondary = Color(0xFFFFFFFF)
27
28
29 @@ -45,7 +45,7 @@ val md_theme_light_inverseOnSurface = Color(0xFFFF1F1EA)
45 val md_theme_light_inverseSurface = Color(0xFF2F312D)
46 val md_theme_light_inversePrimary = Color(0xFF8B0A67)
47 val md_theme_light_shadow = Color(0xFF000000)
48 - val md_theme_light_surfaceTint = Color(0xFF246000)
49 val md_theme_light_outlineVariant = Color(0xFFC3C8B8)
50 val md_theme_light_scrim = Color(0xFF000000)
51
52
53 @@ -74,7 +74,7 @@ val md_theme_dark_onSurfaceVariant = Color(0xFFC3C8B8)
74 val md_theme_dark_outline = Color(0xFF8D9287)
75 val md_theme_dark_inverseOnSurface = Color(0xFF1A1C18)
76 val md_theme_dark_inverseSurface = Color(0xFFE3E3DC)
77 - val md_theme_dark_inversePrimary = Color(0xFF246000)
78 val md_theme_dark_shadow = Color(0xFF000000)
79 val md_theme_dark_surfaceTint = Color(0xFF8B0A67)
80 val md_theme_dark_outlineVariant = Color(0xFF43483E)
81
82
83 @@ -18,13 +18,13 @@ package com.google.samples.apps.sunflower.ui
18
19 import androidx.compose.ui.graphics.Color
20
21 + val md_theme_light_primary = Color(0xFF952323)
22 val md_theme_light_onPrimary = Color(0xFFFFFFFF)
23 val md_theme_light_primaryContainer = Color(0xFFA6F700)
24 val md_theme_light_onPrimaryContainer = Color(0xFF062100)
25 val md_theme_light_secondary = Color(0xFF55624C)
26 val md_theme_light_onSecondary = Color(0xFFFFFFFF)
27
28
29 @@ -45,7 +45,7 @@ val md_theme_light_inverseOnSurface = Color(0xFFFF1F1EA)
45 val md_theme_light_inverseSurface = Color(0xFF2F312D)
46 val md_theme_light_inversePrimary = Color(0xFF8B0A67)
47 val md_theme_light_shadow = Color(0xFF000000)
48 + val md_theme_light_surfaceTint = Color(0xFF952323)
49 val md_theme_light_outlineVariant = Color(0xFFC3C8B8)
50 val md_theme_light_scrim = Color(0xFF000000)
51
52
53 @@ -74,7 +74,7 @@ val md_theme_dark_onSurfaceVariant = Color(0xFFC3C8B8)
74 val md_theme_dark_outline = Color(0xFF8D9287)
75 val md_theme_dark_inverseOnSurface = Color(0xFF1A1C18)
76 val md_theme_dark_inverseSurface = Color(0xFFE3E3DC)
77 + val md_theme_dark_inversePrimary = Color(0xFF952323)
78 val md_theme_dark_shadow = Color(0xFF000000)
79 val md_theme_dark_surfaceTint = Color(0xFF8B0A67)
80 val md_theme_dark_outlineVariant = Color(0xFF43483E)
81
```

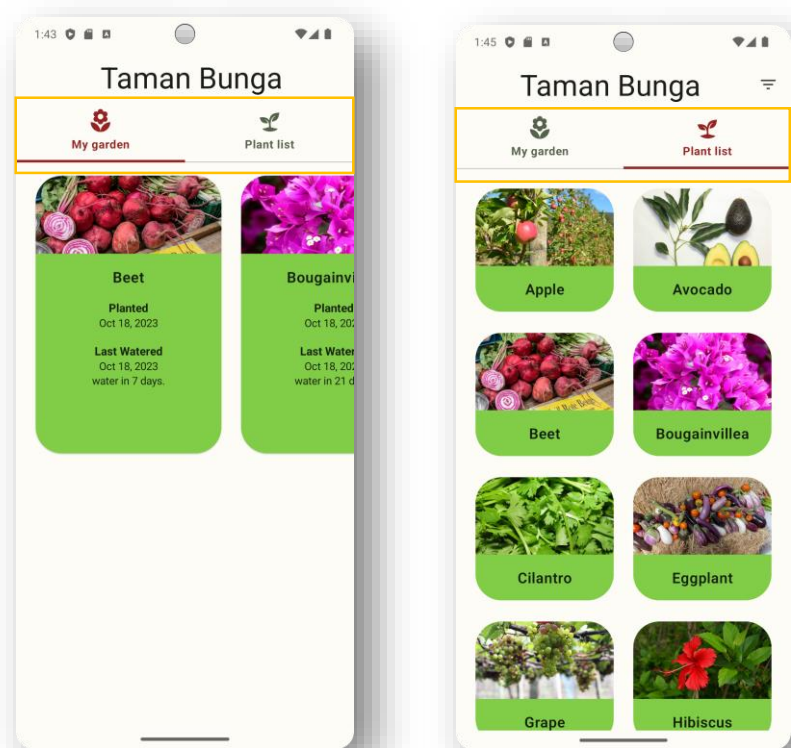
Kode warna yang digunakan : 952323



Tampilan Sebelum mengubah warna navbar :



Tampilan Sesudah mengubah warna navbar :



- Mengubah warna background

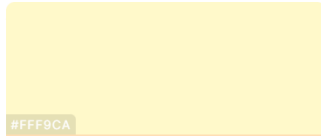
```

34 val md_theme_light_errorcontainer = Color(0xFFFFDAD6)
35 val md_theme_light_onerror = Color(0xFFFFFFFF)
36 val md_theme_light_onerrorcontainer = Color(0xFF410002)
37 - val md_theme_light_background = Color(0xFFFFF0F6)
38 val md_theme_light_onbackground = Color(0xFFFA1C18)
39 - val md_theme_light_surface = Color(0xFFFFF0F6)
40 val md_theme_light_onsurface = Color(0xFFFA1C18)
41 val md_theme_light_surfacevariant = Color(0xFFDCE475)
42 val md_theme_light_onsurfacevariant = Color(0xFF43483E)

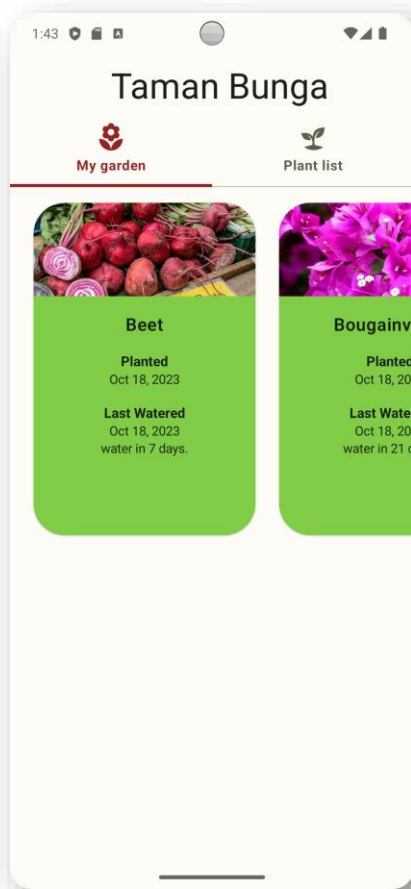
34 val md_theme_light_errorcontainer = Color(0xFFFFDAD6)
35 val md_theme_light_onerror = Color(0xFFFFFFFF)
36 val md_theme_light_onerrorcontainer = Color(0xFF410002)
37 + val md_theme_light_background = Color(0xFFFFF9CA)
38 val md_theme_light_onbackground = Color(0xFFFA1C18)
39 + val md_theme_light_surface = Color(0xFFFFF9CA)
40 val md_theme_light_onsurface = Color(0xFFFA1C18)
41 val md_theme_light_surfacevariant = Color(0xFFDCE475)
42 val md_theme_light_onsurfacevariant = Color(0xFF43483E)

```

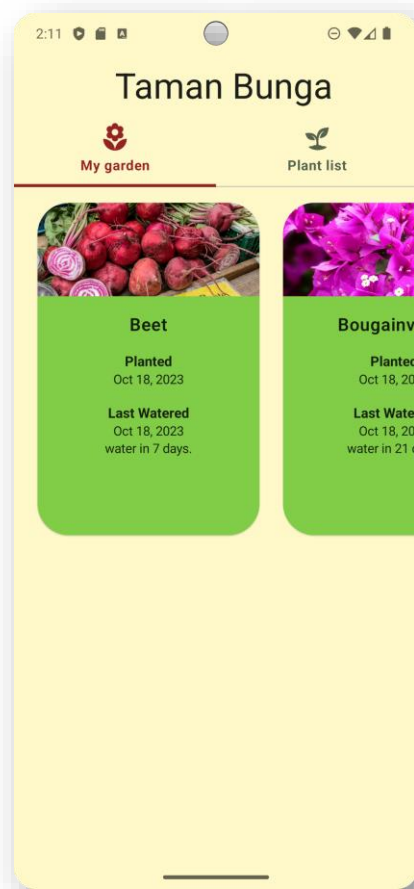
Kode yang diubah : FFF9CA



Tampilan Sebelum mengubah warna background :



Tampilan Sebelum mengubah warna background :



- Riwayat perubahan pada Github : https://github.com/keyynatwgm/002_sunflower.git

