Uniwersytet Wrocławski

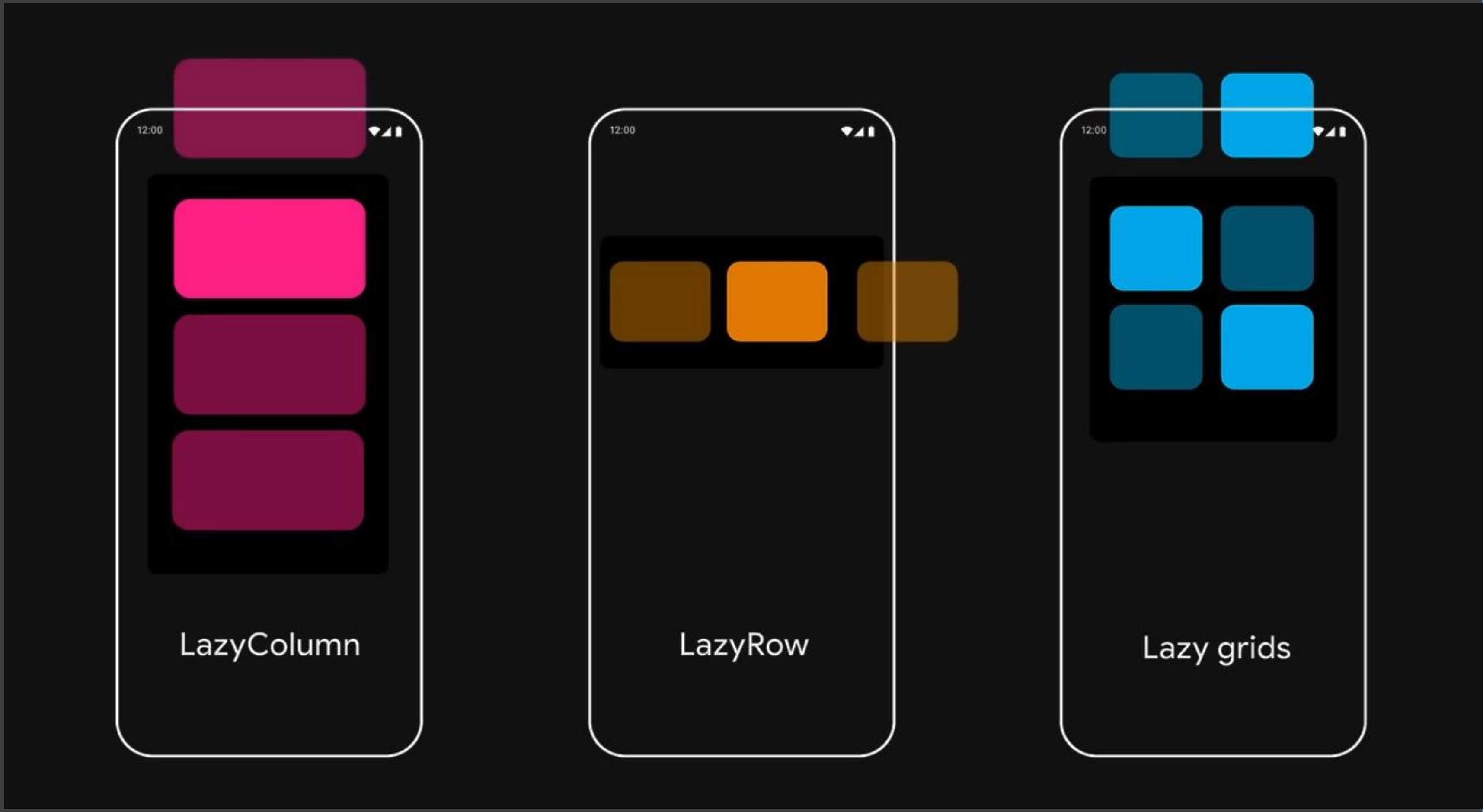
Rafał Lewandków

PROGRAMOWANIE URZĄDZEŃ MOBILNYCH

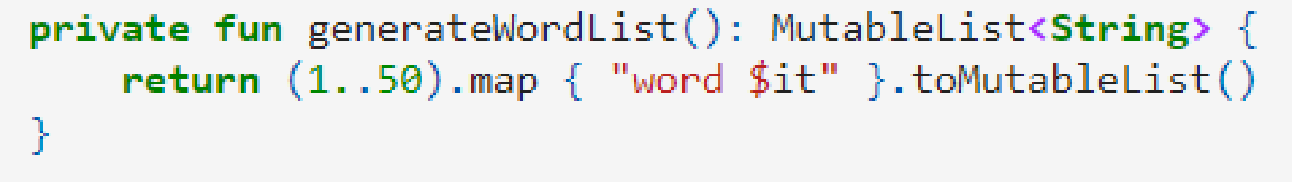
WYKŁAD 6
Jetpack Compose

- LazyColumn, LazyRow
- Listy
- Pager

Jetpack Compose

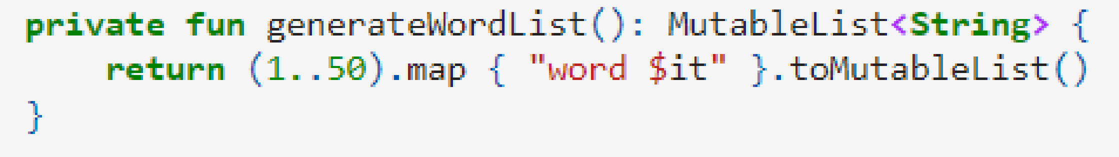


Jetpack Compose

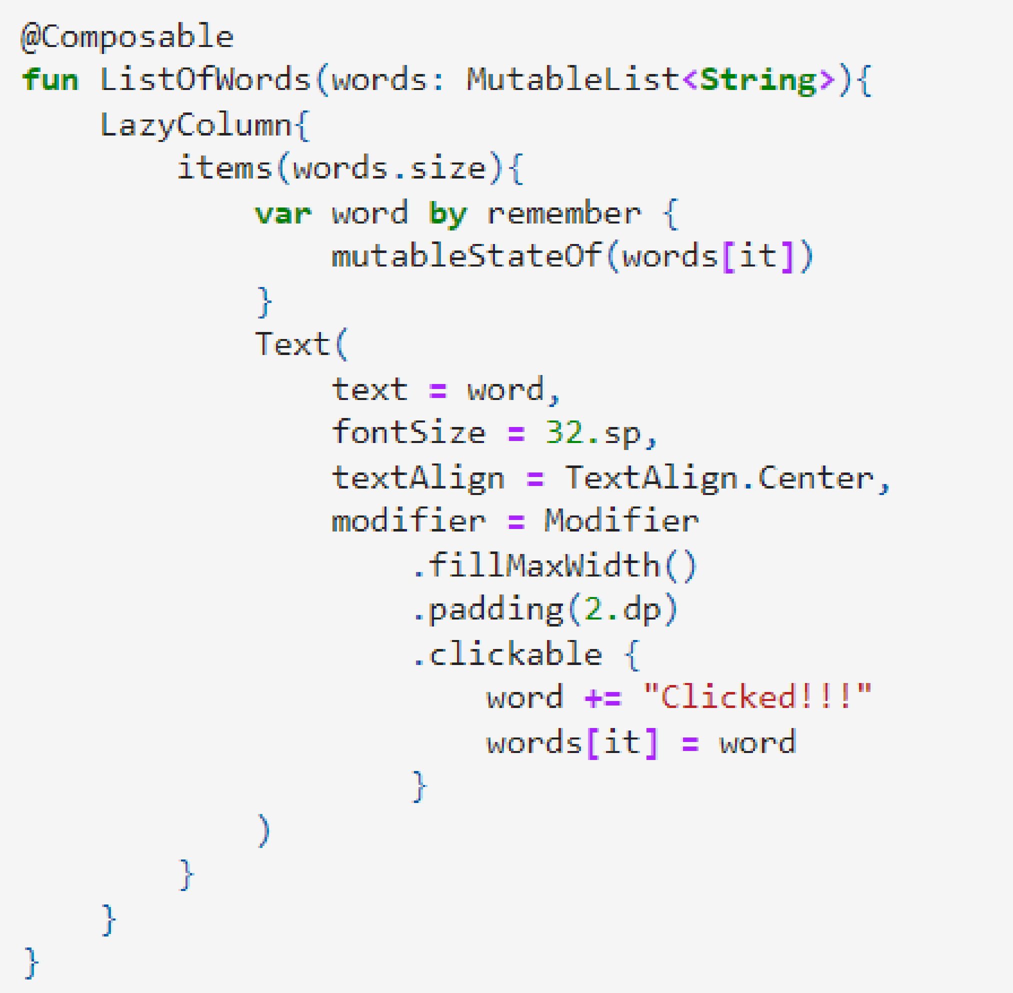


```kotlin
private fun generateWordList(): MutableList<String> {
    return (1..50).map { "word $it" }.toMutableList()
}
```

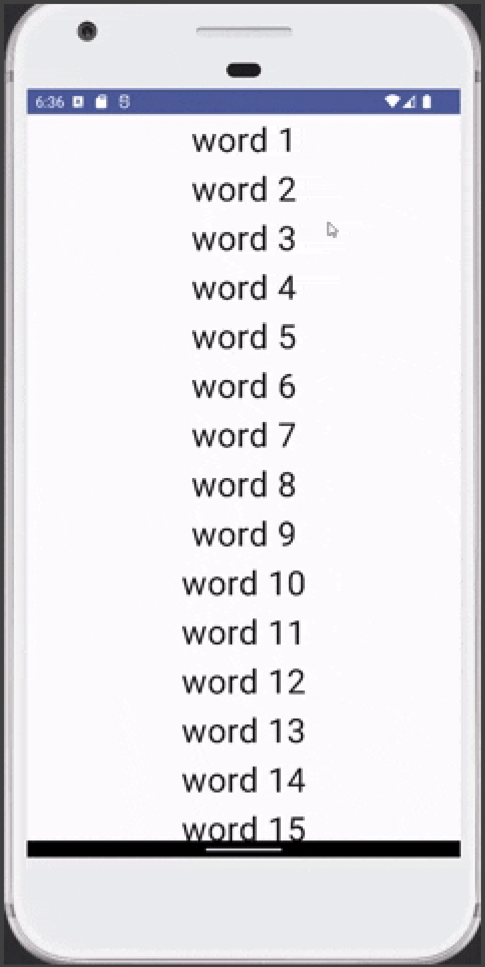
LazyColumn



```
private fun generateWordList(): MutableList<String> {
    return (1..50).map { "word $it" }.toMutableList()
}
```

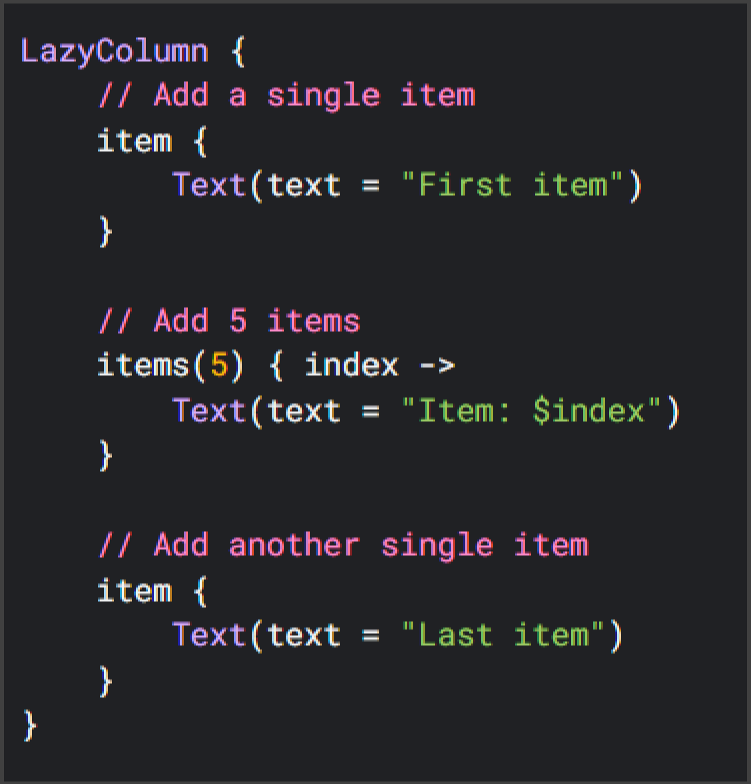


```
@Composable
fun ListOfWords(words: MutableList<String>){
    LazyColumn{
        items(words.size){
            var word by remember {
                mutableStateOf(words[it])
            }
            Text(
                text = word,
                fontSize = 32.sp,
                textAlign = TextAlign.Center,
                modifier = Modifier
                    .fillMaxWidth()
                    .padding(2.dp)
                    .clickable {
                        word += "Clicked!!!"
                        words[it] = word
                    }
            )
        }
    }
}
```



```
6:36
word 1
word 2
word 3
word 4
word 5
word 6
word 7
word 8
word 9
word 10
word 11
word 12
word 13
word 14
word 15
```

LazyColumn

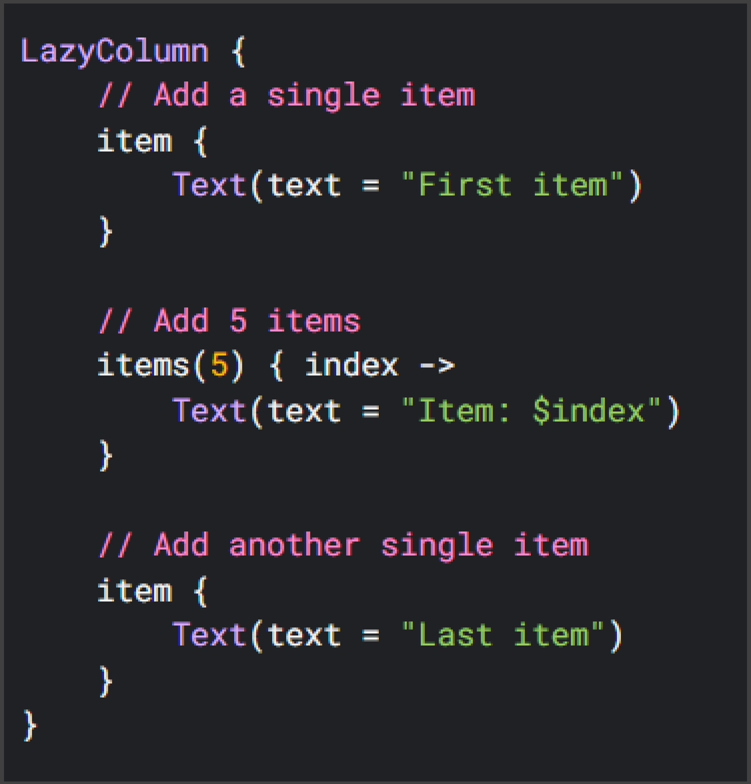


```
LazyColumn {
    // Add a single item
    item {
        Text(text = "First item")
    }

    // Add 5 items
    items(5) { index ->
        Text(text = "Item: $index")
    }

    // Add another single item
    item {
        Text(text = "Last item")
    }
}
```

LazyColumn



```
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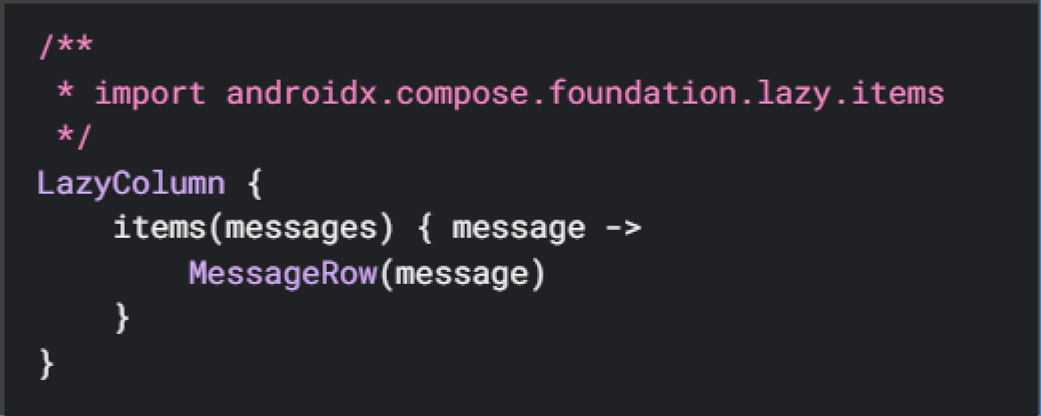
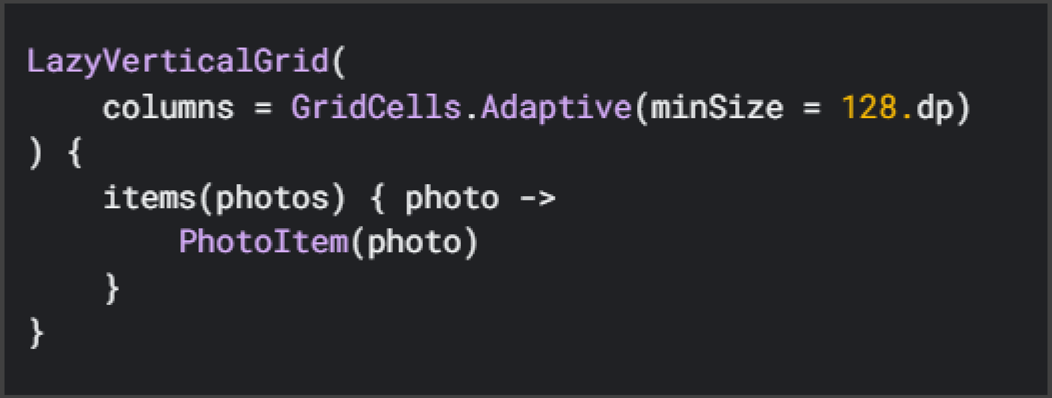
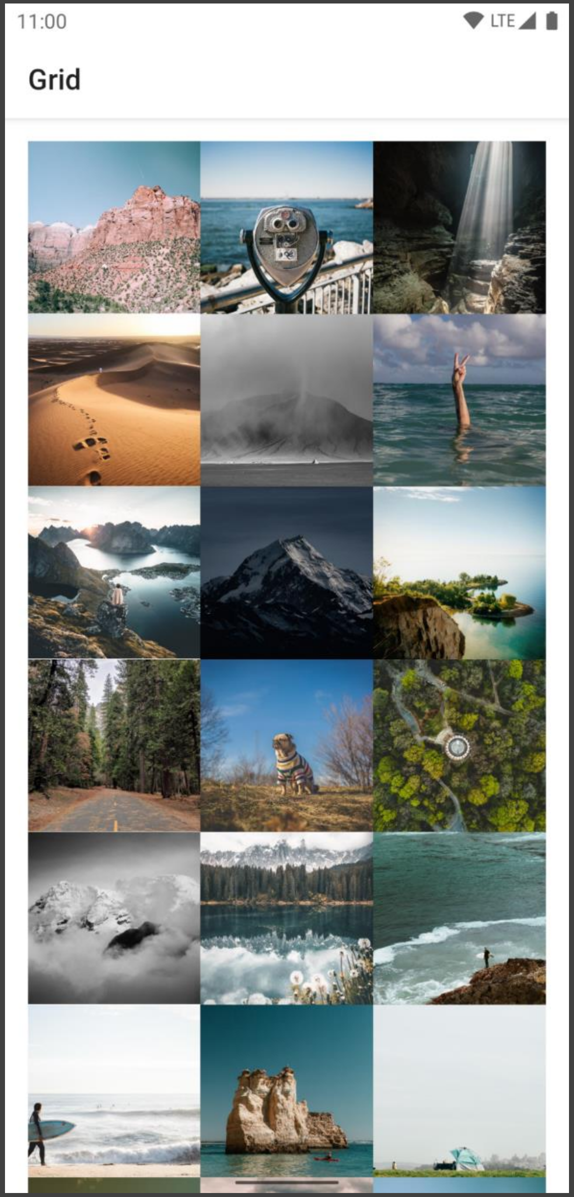


```
/**
 * import androidx.compose.foundation.lazy.items
 */
LazyColumn {
    items(messages) { message ->
        MessageRow(message)
    }
}
```

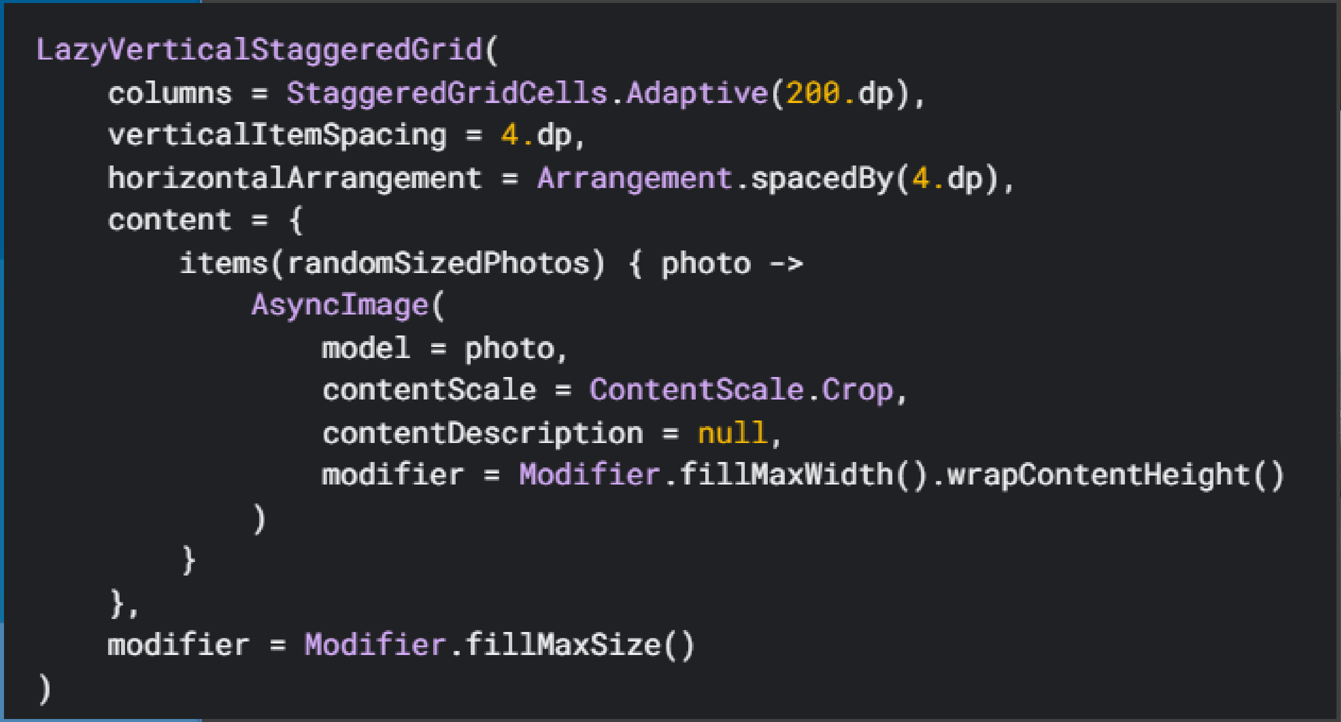
Grid



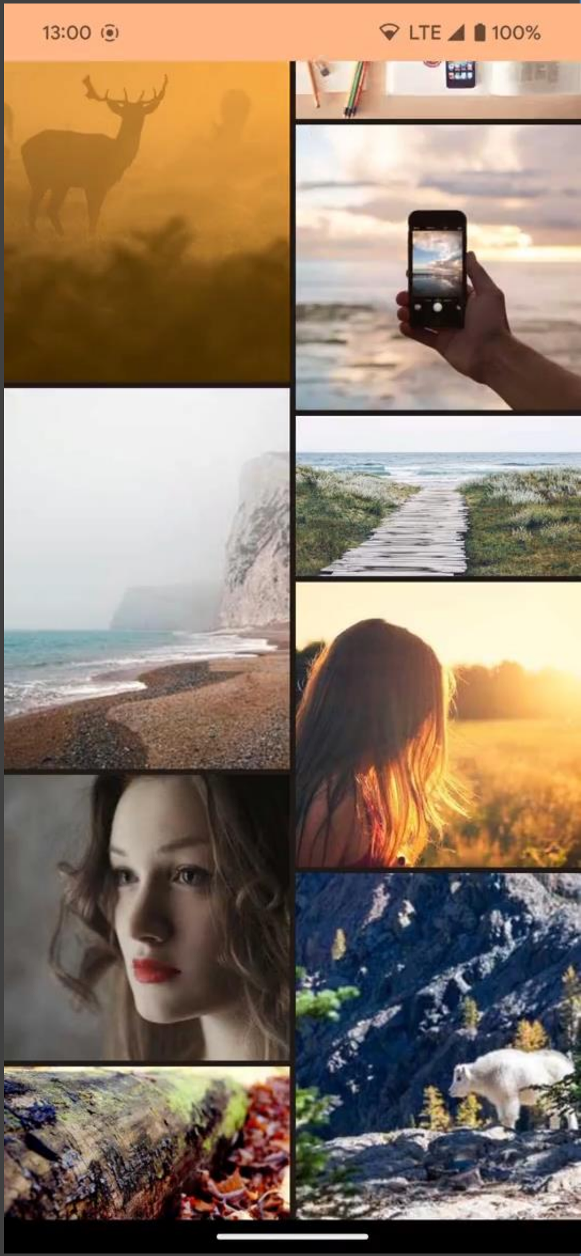
```
LazyVerticalGrid(
    columns = GridCells.Adaptive(minSize = 128.dp)
) {
    items(photos) { photo ->
        PhotoItem(photo)
    }
}
```



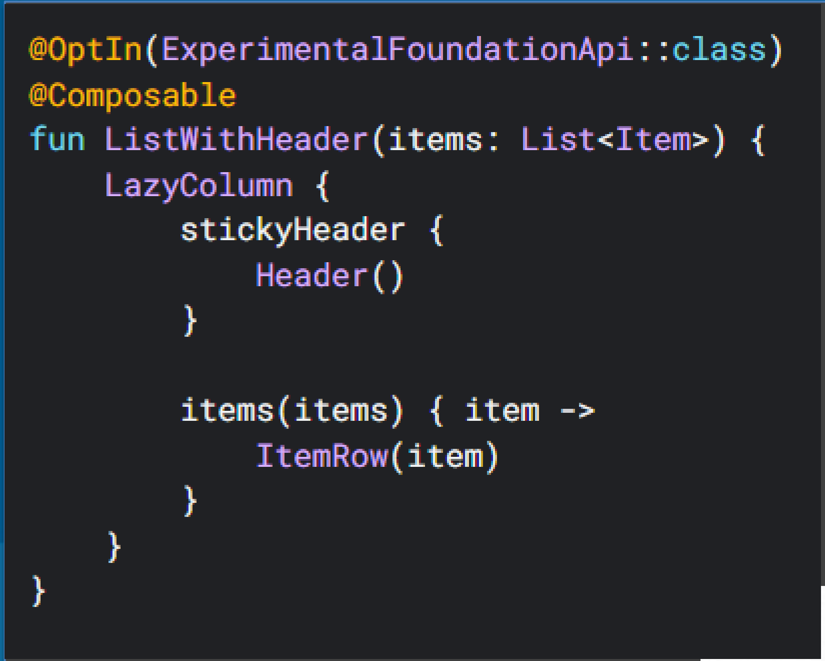
Grid



```
LazyVerticalStaggeredGrid(
    columns = StaggeredGridCells.Adaptive(200.dp),
    verticalItemSpacing = 4.dp,
    horizontalArrangement = Arrangement.spacedBy(4.dp),
    content = {
        items(randomSizedPhotos) { photo ->
            AsyncImage(
                model = photo,
                contentScale = ContentScale.Crop,
                contentDescription = null,
                modifier = Modifier.fillMaxWidth().wrapContentHeight()
            )
        }
    },
    modifier = Modifier.fillMaxSize()
)
```

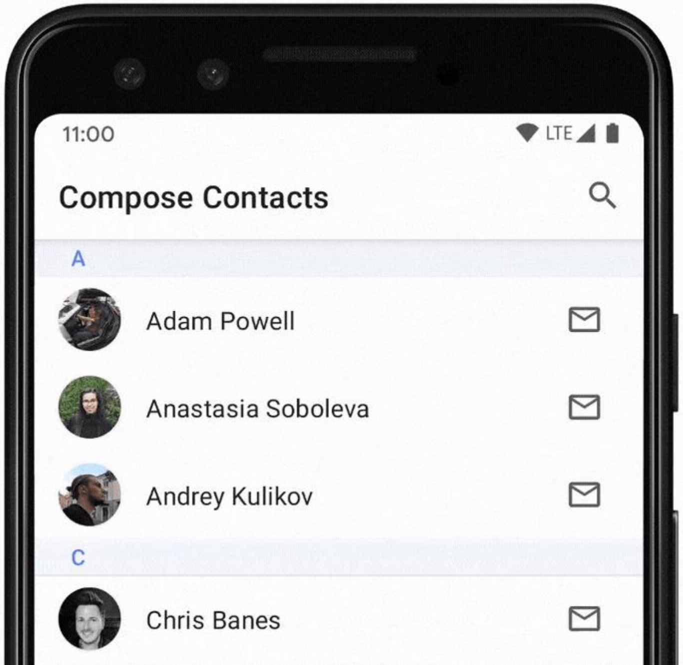


StickyHeader



```
@OptIn(ExperimentalFoundationApi::class)
@Composable
fun ListWithHeader(items: List<Item>) {
    LazyColumn {
        stickyHeader {
            Header()
        }

        items(items) { item ->
            ItemRow(item)
        }
    }
}
```



11:00

Compose Contacts

A

Adam Powell

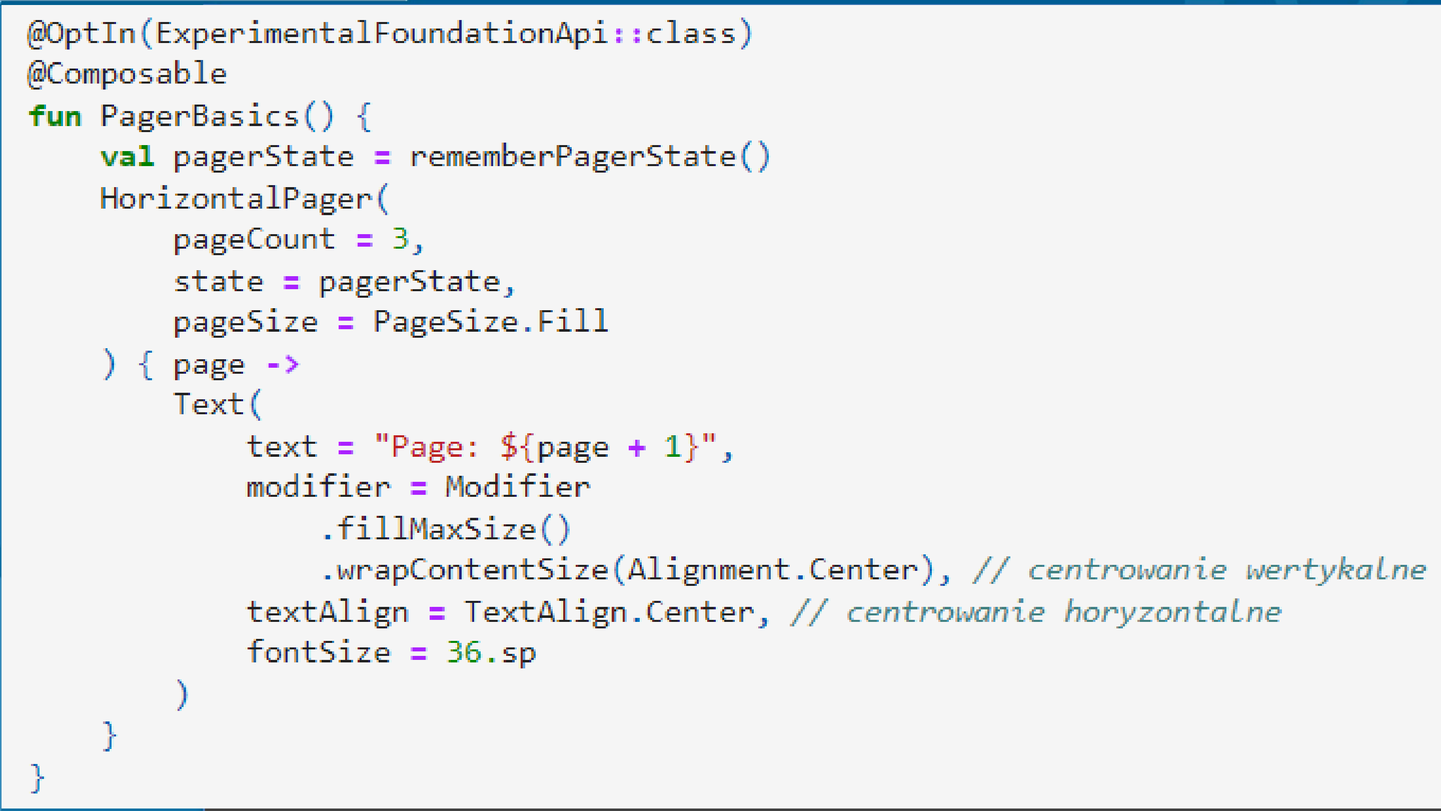
Anastasia Soboleva

Andrey Kulikov

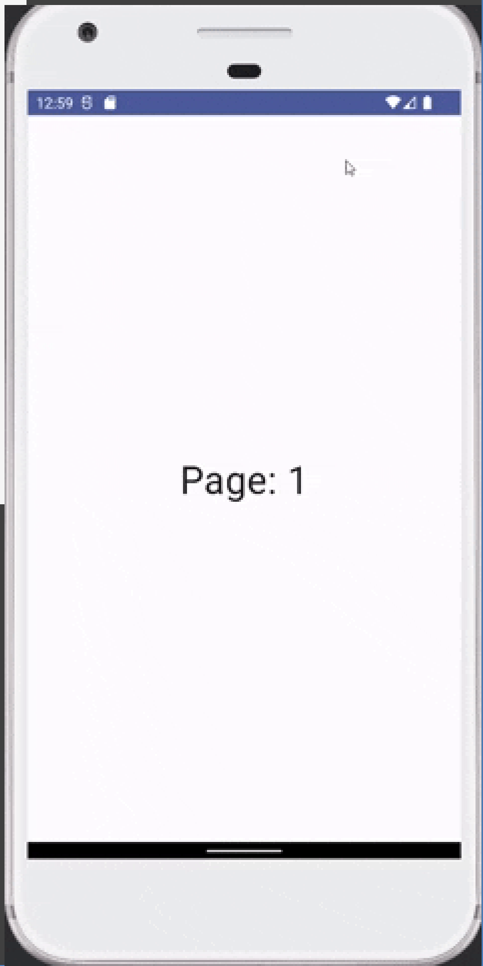
C

Chris Banes

Pager

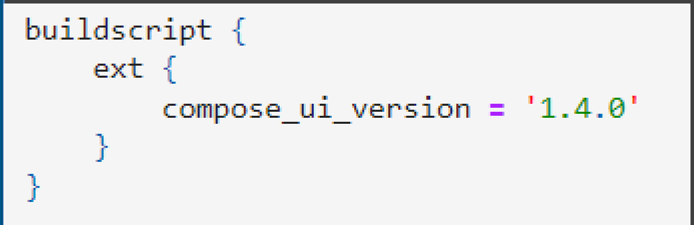


```
@OptIn(ExperimentalFoundationApi::class)
@Composable
fun PagerBasics() {
    val pagerState = rememberPagerState()
    HorizontalPager(
        pageCount = 3,
        state = pagerState,
        pageSize = PageSize.Fill
    ) { page ->
        Text(
            text = "Page: ${page + 1}",
            modifier = Modifier
                .fillMaxSize()
                .wrapContentSize(Alignment.Center), // centrowanie wertykalne
            textAlign = TextAlign.Center, // centrowanie horyzontalne
            fontSize = 36.sp
        )
    }
}
```

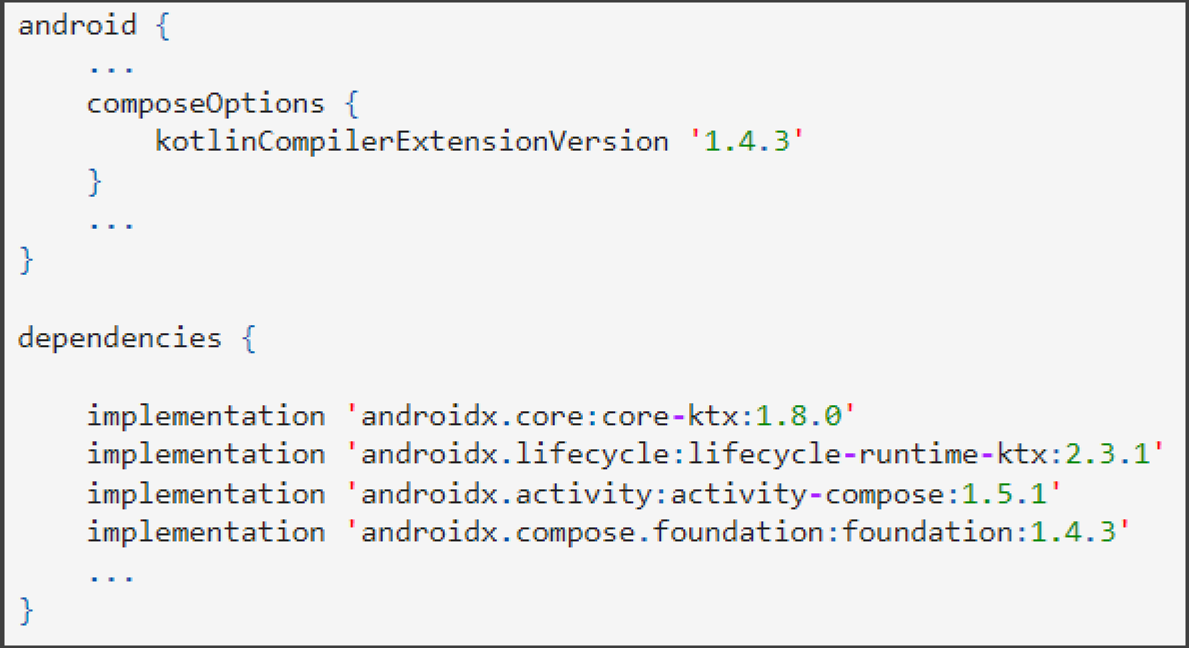


Page: 1

Pager



```
buildscript {
    ext {
        compose_ui_version = '1.4.0'
    }
}
```



```
android {
    ...
    composeOptions {
        kotlinCompilerExtensionVersion '1.4.3'
    }
    ...
}

dependencies {

    implementation 'androidx.core:core-ktx:1.8.0'
    implementation 'androidx.lifecycle:lifecycle-runtime-ktx:2.3.1'
    implementation 'androidx.activity:activity-compose:1.5.1'
    implementation 'androidx.compose.foundation:foundation:1.4.3'
    ...
}
```