

PROYECTO FINAL DE CARRERA

DESARROLLO DE APLICACIÓN MÓVIL PARA EL DISEÑO Y PROCESAMIENTO DE ENCUESTAS PÚBLICAS SOBRE SALUD



Facultad de Ingeniería y Ciencias Hídricas, Universidad Nacional del Litoral
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Agenda

- ▶ Motivación, objetivos y alcance
- ▶ Análisis del problema
- ▶ Herramientas y tecnologías
- ▶ Desarrollo
 - ▷ Web Service
 - ▷ Aplicación
- ▶ Pruebas y demo
- ▶ Conclusiones y comentarios finales

1.

Motivación, objetivos y
alcance

Motivación

- Herramienta para obtener datos sobre una población.
- Medidas preventivas e informativas.
- Motivos:
 - Conocer problemas de salud en población.
 - Utilización de servicios de salud.
 - Relación estado-salud.
 - Análisis zonales y temporales.
 - Políticas de salubridad.
- Falencias:
 - Análisis de datos.
 - Carga manual.
 - Errores en carga.
 - Reducción de alcance.
- Evolución de tecnologías y aplicaciones móviles.



Objetivos

GENERAL

Diseñar y desarrollar una aplicación móvil en la plataforma Android, para la confección, resolución y procesamiento de encuestas digitales en la Facultad de Ciencias Médicas de la Universidad Nacional del Litoral.

Alcance

- Desarrollo de aplicación de manera nativa para el sistema operativo Android (versión mínima 4.4 KitKat).
- Web Service REST de alta disponibilidad.
- Aplicación de controles sobre la resolución de encuestas.
- Brindar al usuario información y noticias sobre epidemiologías.
- Brindar al usuario herramientas estadísticas.
- Envío de notificaciones.
- Análisis a cargo de profesionales.
- No se realizará el despliegue del Web Service.

2.

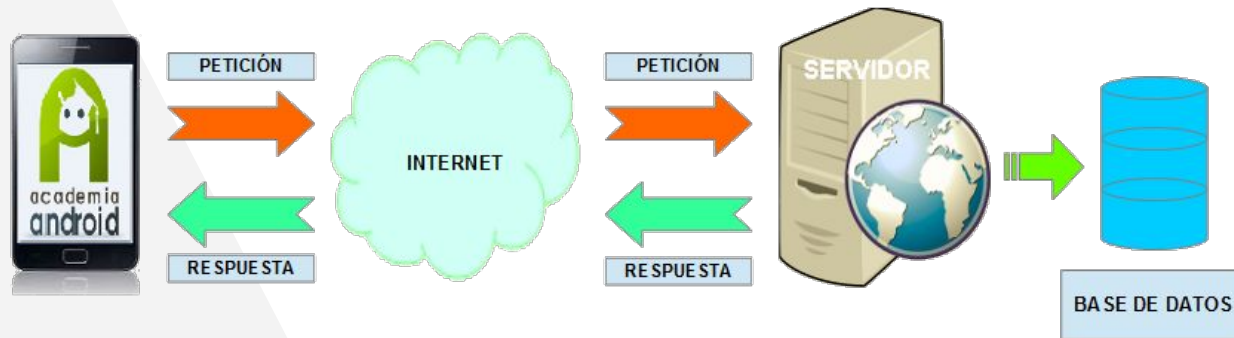
Análisis del problema

Requerimientos

FUNCIONALES	NO FUNCIONALES
Registro e inicio de sesión. Código de validación para “Usuarios Específicos”.	Dispositivo móvil con versión de Android mayor o igual a la 4.4 (KitKat).
Menú con distintas funcionalidades.	Dispositivo con acceso a GPS y conexiones móviles.
Controles, validaciones y resoluciones.	Interfaz gráfica sencilla e intuitiva.
Realizar ABM de Encuestas / Sección noticias.	Transacciones inmediatas y concurrentes.
Auditoría de encuestas.	Almacenamientos transaccionales.
Geolocalizar usuarios y posicionamiento manual.	
Gráficos y mapas estadísticos instantáneos.	
Exportación de resultados.	

Propuesta de Solución

- Arquitectura Cliente-Servidor (App-Web Service).
- Lógica de negocios principalmente en Web Service.
- Acceso a base de datos.
- Servicios expuestos (endpoints).
- Escalabilidad.



3.

Herramientas y tecnologías

Herramientas y Tecnologías

Lenguajes Programación

- Java 1.8.0
- Android



IDE's

- Android Studio
- IntelliJ IDEA



Base de Datos

- MySQL 5.7.23



API's y Librerías

- Firebase
- Google Maps
- MPAndroidChart
- OpenCSV



Frameworks

- Spring
- Hibernate
- JUnit



Versionador

- GitHub



Servlet

- Apache Tomcat 8



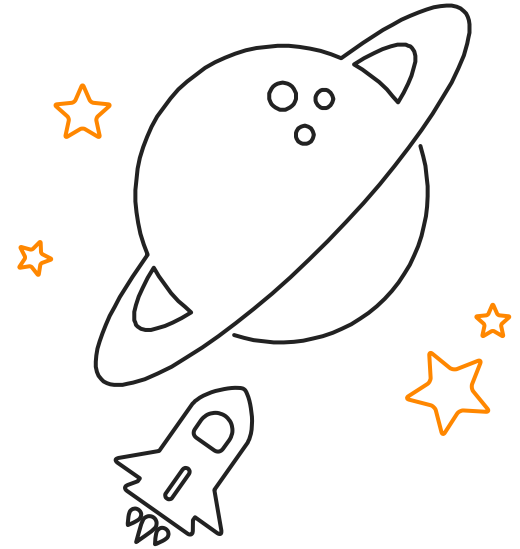
Java 8

HELLO!

I am Jayden Smith

I am here because I love to give presentations.

You can find me at
@username



BIG CONCEPT

Bring the attention of your audience over a key concept using icons or illustrations

You can also split your content

White

Is the color of milk and fresh snow, the color produced by the combination of all the colors of the visible spectrum.

Black

Is the color of coal, ebony, and of outer space. It is the darkest color, the result of the absence of or complete absorption of light.

In two or three columns

Yellow

Is the color of gold, butter and ripe lemons. In the spectrum of visible light, yellow is found between green and orange.

Blue

Is the colour of the clear sky and the deep sea. It is located between violet and green on the optical spectrum.

Red

Is the color of blood, and because of this it has historically been associated with sacrifice, danger and courage.

1.

Transition headline

Let's start with the first set of slides

A picture is worth a thousand words

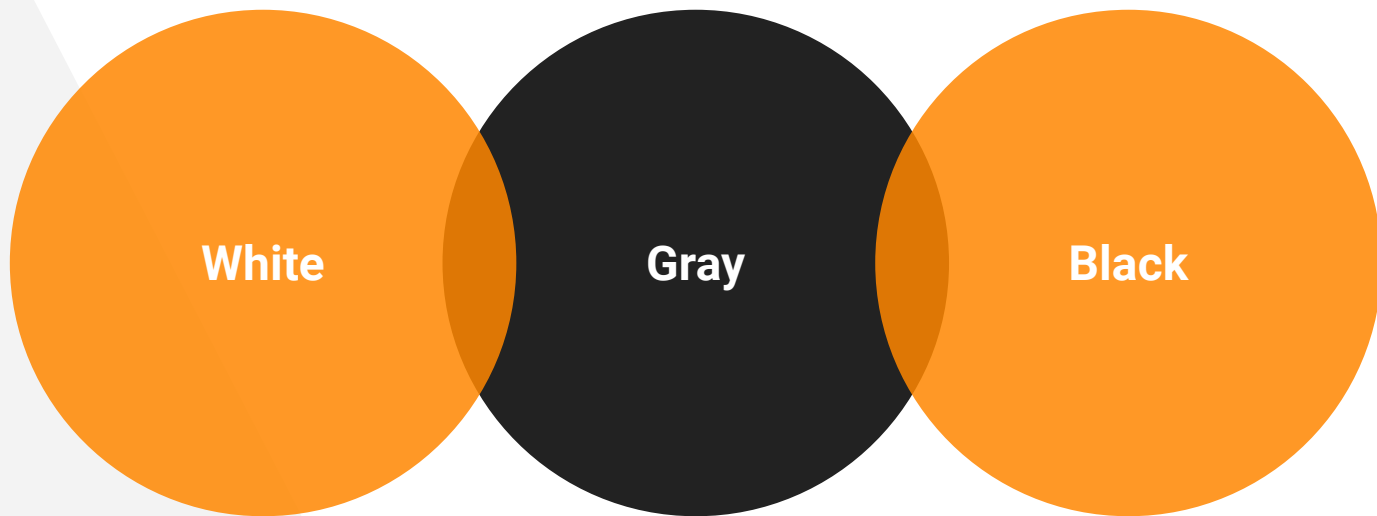
A complex idea can be conveyed with just a single still image, namely making it possible to absorb large amounts of data quickly.



Want big impact? USE BIG IMAGE

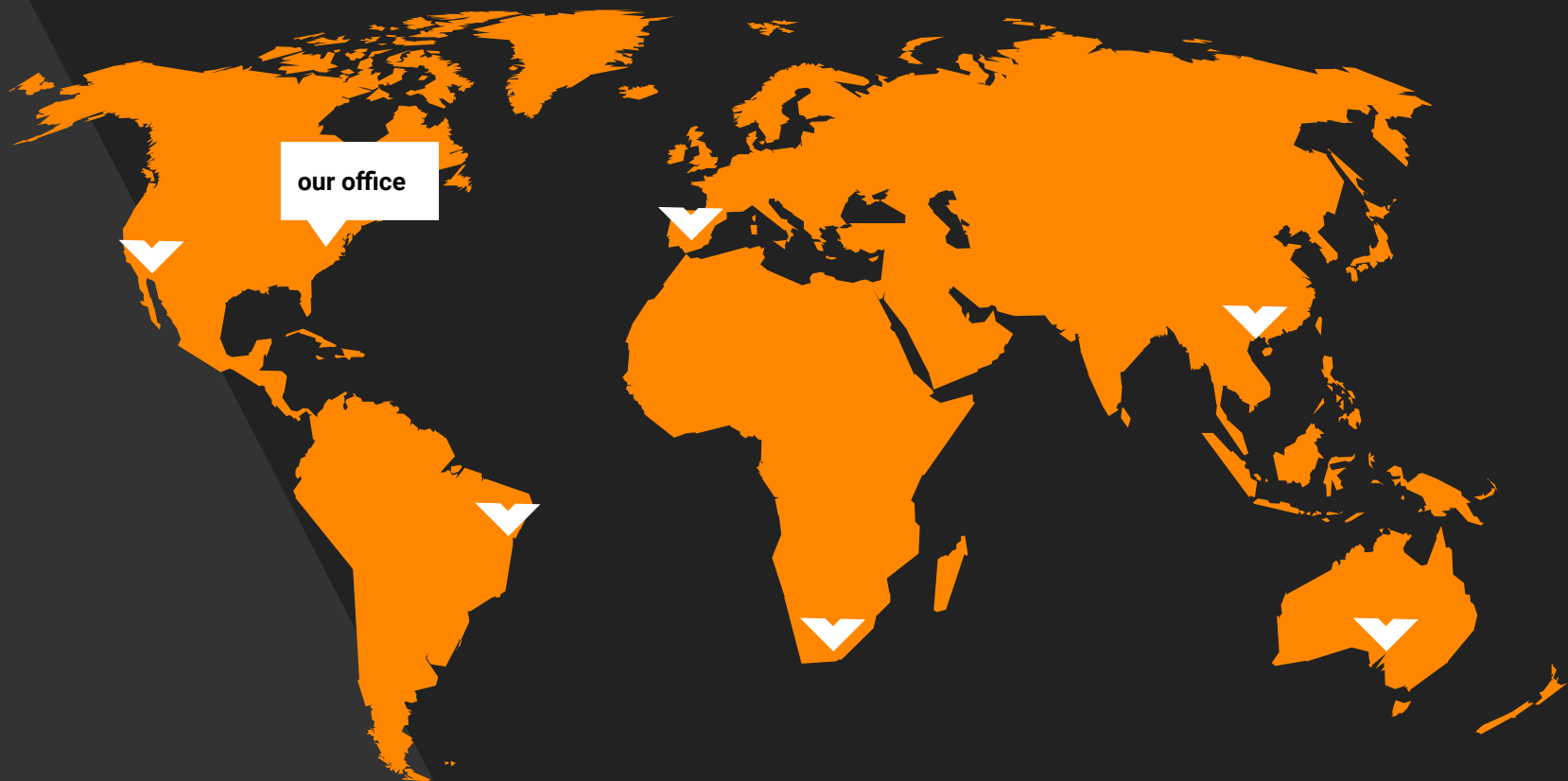


Use charts to explain your ideas



And tables to compare data

	A	B	C
Yellow	10	20	7
Blue	30	15	10
Orange	5	24	16



89,526,124

Whoa! That's a big number,
aren't you proud?

89,526,124\$

That's a lot of money

185,244 users

And a lot of users

100%

Total success!

Our process is easy



```
graph LR; A[first] --> B[second]; B --> C[last];
```

first

second

last

Let's review some concepts

Yellow

Is the color of gold, butter and ripe lemons. In the spectrum of visible light, yellow is found between green and orange.

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Red

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Yellow

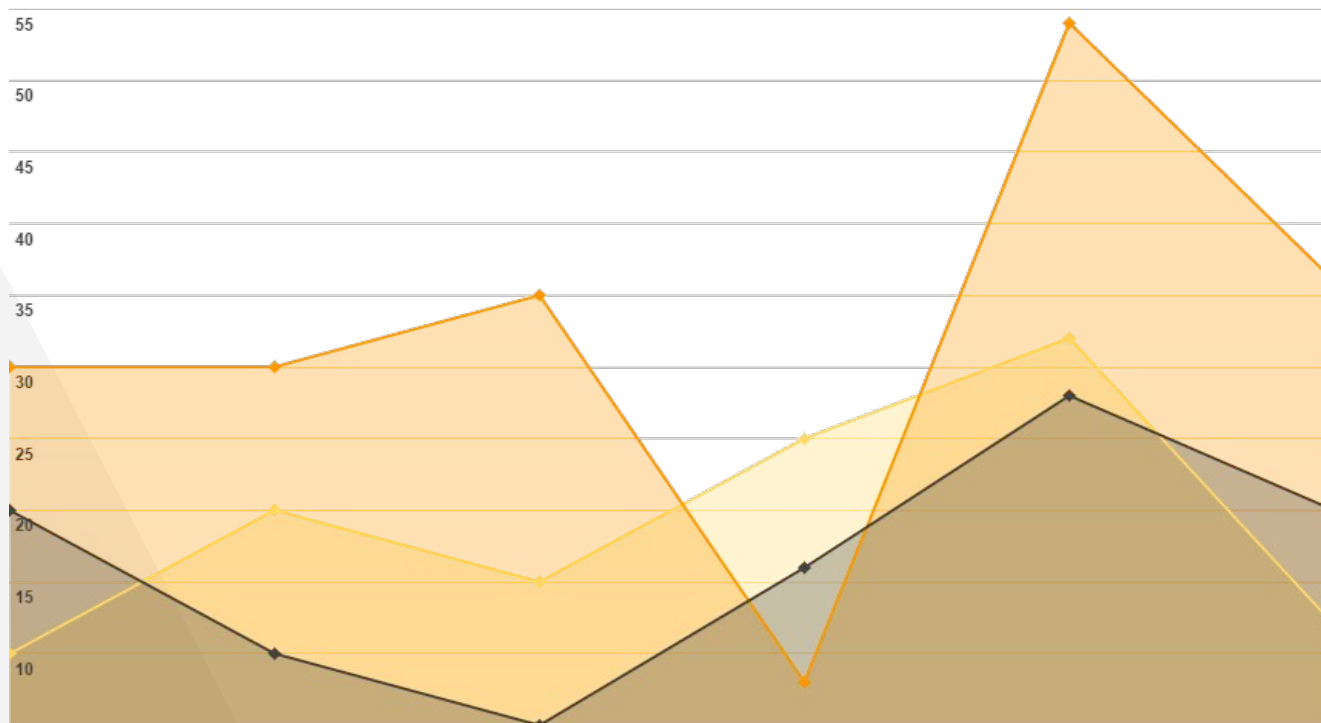
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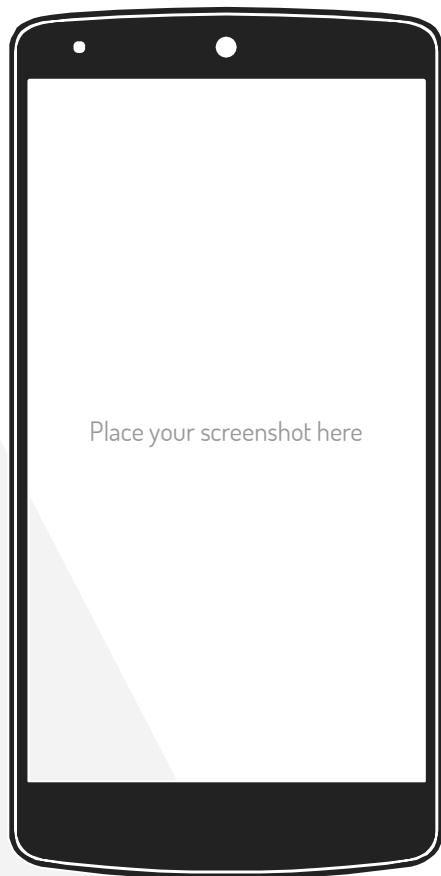
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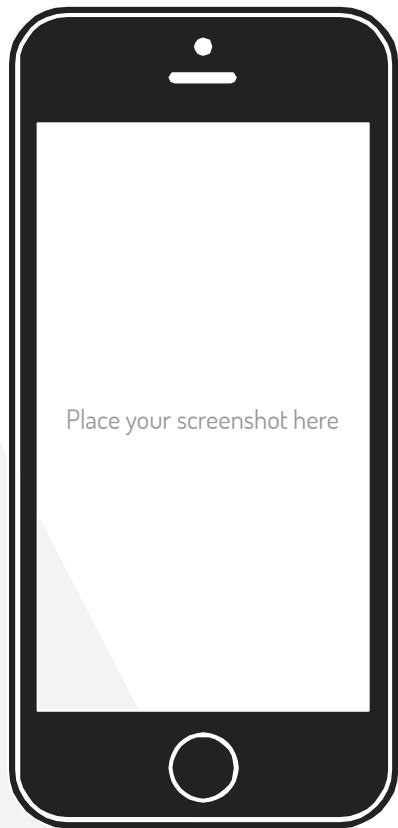


You can insert graphs from [Google Sheets](#)



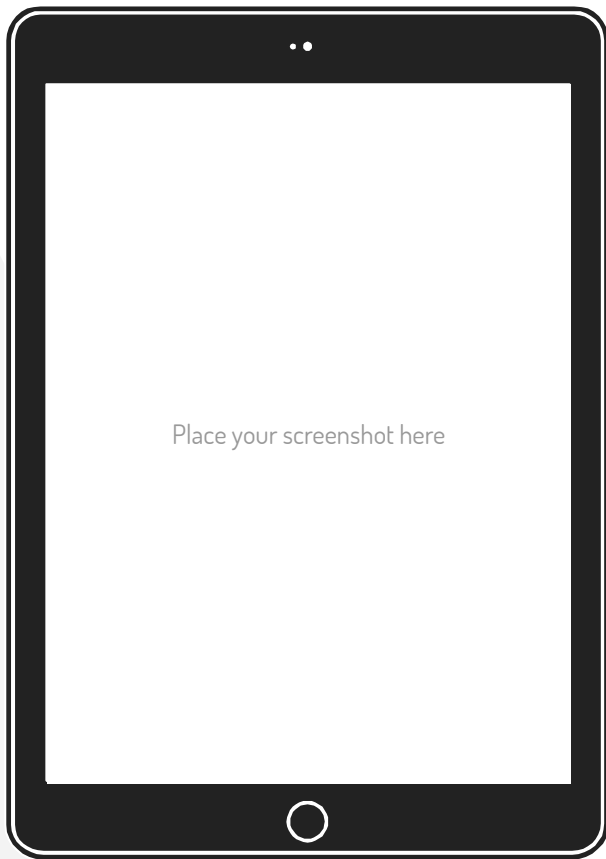
ANDROID PROJECT

Show and explain your web, app or software projects using these gadget templates.



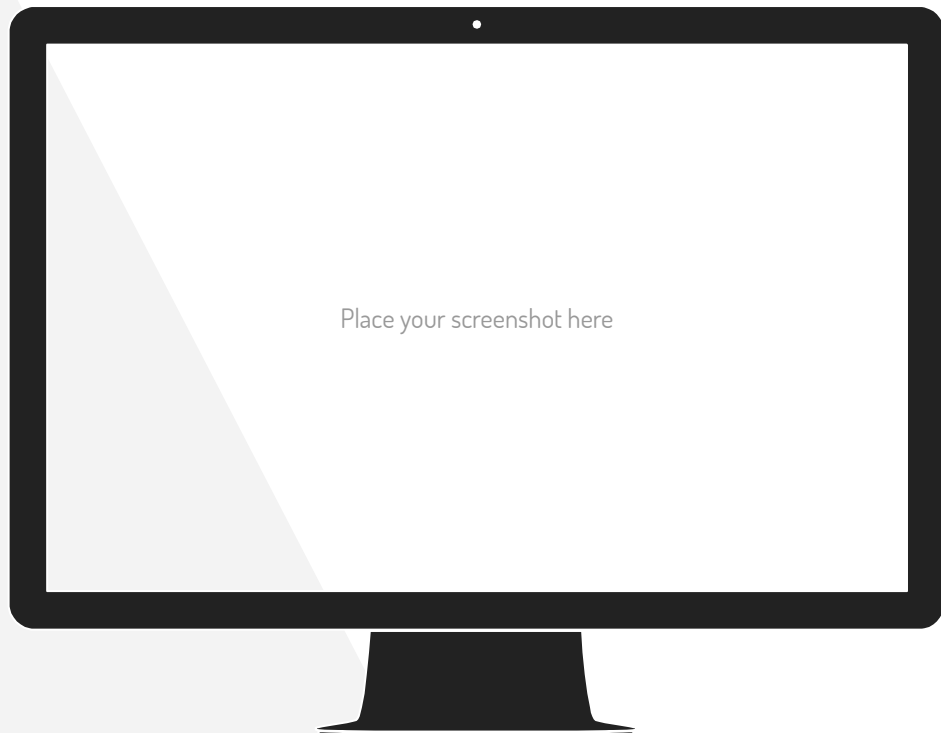
iPHONE PROJECT

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TABLET PROJECT

Show and explain your web, app or software projects using these gadget templates.



DESKTOP PROJECT

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MUCHAS GRACIAS!

Preguntas?

Credits

Special thanks to all the people who made and released these awesome resources for free:

- ▶ Presentation template by [SlidesCarnival](#)
- ▶ Photographs by [Startupstockphotos](#)

Presentation design

This presentation uses the following typographies and colors:

- ▶ Titles: **Dosis**
- ▶ Body copy: **Roboto**

You can download the fonts on these pages:

<https://www.fontsquirrel.com/fonts/dosis>

<https://material.google.com/resources/roboto-noto-fonts.html>

- ▶ Orange **#ff8700**

You don't need to keep this slide in your presentation. It's only here to serve you as a design guide if you need to create new slides or download the fonts to edit the presentation in PowerPoint®

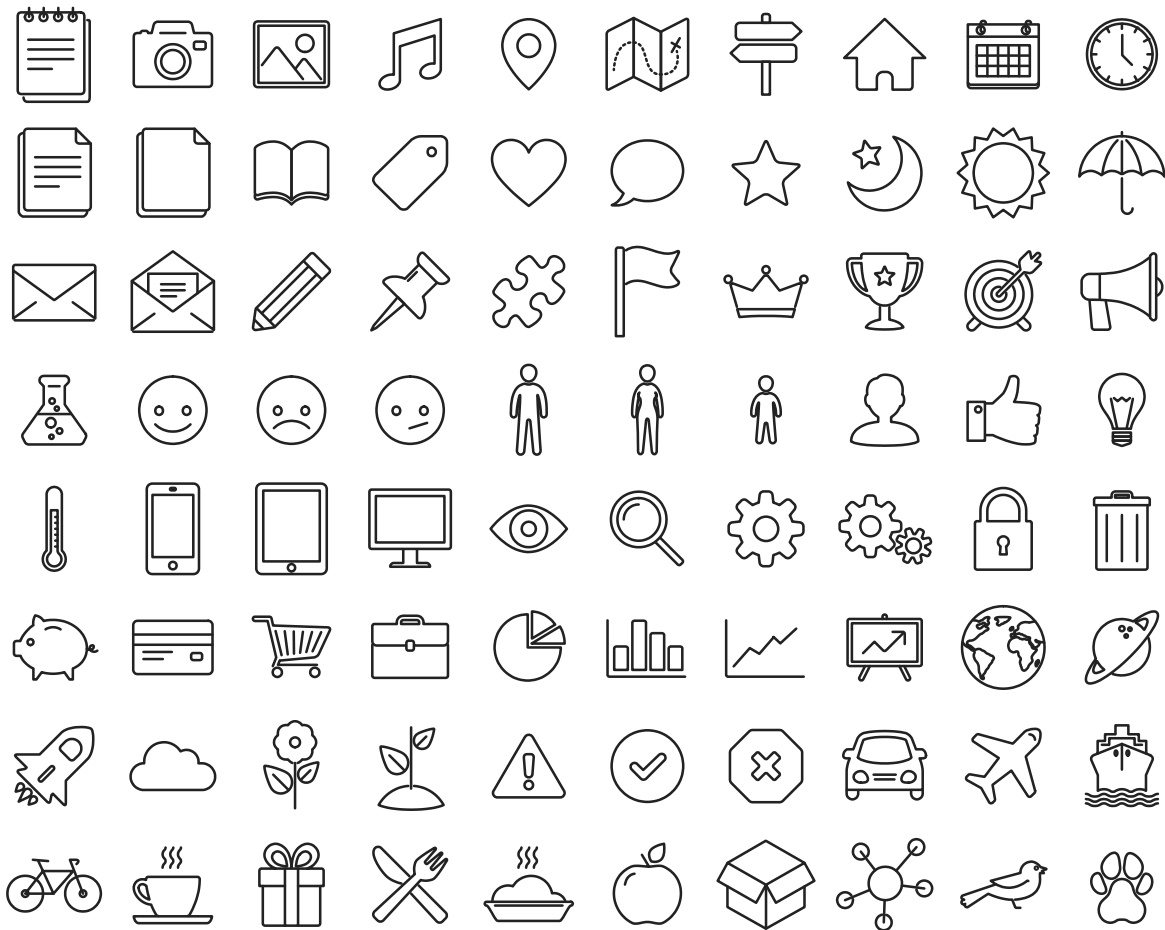
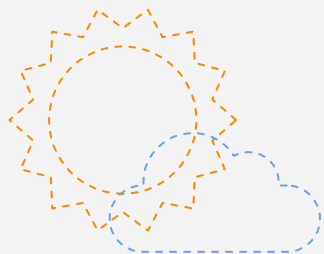
SlidesCarnival icons are editable shapes.

This means that you can:

- Resize them without losing quality.
- Change line color, width and style.

Isn't that nice? :)

Examples:



Now you can use any emoji as an icon!

And of course it resizes without losing quality and you can change the color.

How? Follow Google instructions

<https://twitter.com/googledocs/status/730087240156643328>



more...