# Omega App Template

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This is a blank app that can be used as a template or guide to writing an app for NumWorks calculators.

# Initial Steps

## MS Windows

For MS Windows, you will need to install WSL or MSYS2 in order to compile Omega.

### WSL

For WSL, you will need to follow the same instructions for whatever Linux distribution you choose to install.

### MSYS2

For MYSYS2, you will need to run this:

```
# pacman -S mingw-w64-x86_64-gcc mingw-w64-x86_64-freetype
mingw-w64-x86_64-pkg-config mingw-w64-x86_64-libusb git make python

echo "export PATH=/mingw64/bin:$PATH" >> .bashrc
```

## macOS

```
# /bin/bash -c "$(curl -fsSL
https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)" #install
Homebrew

# brew install numworks/tap/epsilon-sdk #install NumWorks SDK
```

## Linux

### Fedora

```
# dnf groupinstall -y "Development Tools"
# dnf install -y arm-none-eabi-gcc
```

### Debian/Ubuntu

```
# apt-get install build-essential git imagemagick libx11-dev libxext-dev
libfreetype6-dev libpng-dev libjpeg-dev pkg-config
```

### Arch Linux

```
# pacman -S git make python
```

# Native/Internal App

## Getting Started

1. Clone this repo:

```
git clone https://github.com/Omega-Numworks/Omega-App-Template.git
```

   The template for a native/internal app can be found in `app_native`.

2. Edit the files with a text editor (notepad, notepad++, nano, etc).

   Things you should bare in mind:

- Make sure you are consistent with your naming.
- It does not matter what text editor you use.

   Here is a brief table of what the files do:

| File | Information |
|---|---|
| app.cpp | The main app file. |
| app.h | The header for your app file. |
| base.en.i18n | English translation of your app. |
| base.de.i18n | German translation of your app. |
| base.es.i18n | Spanish translation of your app. |
| base.fr.i18n | French translation of your app. |
| base.hu.i18n | Hungarian translation of your app. |
| base.it.i18n | Italian translation of your app. |
| base.nl.i18n | Dutch translation of your app. |
| base.pt.i18n | Portuguese translation of your app. |

   Further information can be found in comments within the files.

3. Add your app to Omega
   1. If you have not already, run `git clone --recursive https://github.com/Omega-Numworks/Omega.git` to clone the Omega repo with all its submodules.
   2. Copy your app's folder to `Omega/apps`
   3. In `Omega/build/config.mak`, add the name of your app's folder.
4. Compile your app with Omega/Epsilon

   **Model N0110**

```
make clean
make OMEGA_USERNAME="{Your, max 15 characters}" -j4
make epsilon_flash
```

   You can change the number of processes that run in parallel during the build by changing the value of the `-j` flag.

   **Model N0100**

```
make MODEL=n0100 clean
```

```
make MODEL=n0100 OMEGA_USERNAME="{Your, max 15 characters}" -j4
make MODEL=n0100 epsilon_flash
```

You can change the number of processes that run in parallel during the build by changing the value of the `-j` flag.

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# Legal

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