



Maker Project: Green Light

The project formerly known as ft_saladtowers

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Summary: You've got the green light to grow your skills!

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Chapter I

Foreword

California can now legally grow up to six marijuana plants at home, including all of the harvest from those plants.

Every Californian adult of 21 years of age can now legally grow marijuana. It is an event that was destined to occur, much like the end of prohibition. Before you grow anything, know there are some rules:

Possess no more than six plants at anytime.

Grow **only where** you live, where it cannot be seen and lock it.

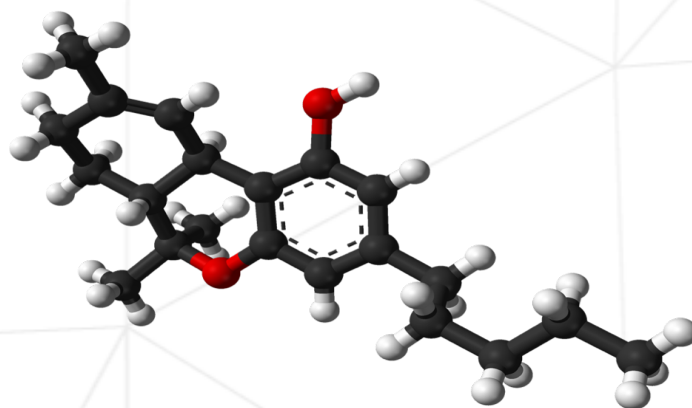
Never have more than an ounce on you, 28.5 grams

Your city might prohibit outdoor growing, but cannot prohibit indoor growing.

The act of growing is still **federally illegal**.

Knowing how to grow marijuana plants, in california or otherwise, might help you with this project.

The use of marijuana just might not. [It's not ruled out.](#)



Chapter II

Introduction

42 is a school from the future, help it look that way:

We're going green!

This project is part of the 42 Maker movement, students are encouraged to come up with ideas that are:

Super futuristic and **Awesome**.

But also must be full of learning and technology!

Your project is to create what was first known as ft_saladtowers:

A hydroponic vertical planter, growing with the light of LEDs.

Then program sensors to tell the health of the plant.

With the aim to grow your skills, grow plants and have fun!

But wait there's more!

Chapter III

Goals

The student leader will form a team of up to three more members.

Prototype the build then perform three important steps:

Polish the build into a product.

Link your learning back to the Program.

Present the finished product.

This is a great project for team building, creativity and adaptation and learning more about hardware and systems.

Sensors and output are a must.

Actuators if they make sense!

A website? Media? What does your project need to stand out?

What can your team do to impress these three types of judges?

Peer Judges

Technical Judges

Non Technical Judges

Chapter IV

General instructions

It's all about learning and [ship it!](#)

Learning:

What skills from the 42 curriculum can you use on the project?

What else do you need to learn?

What can you teach your team members?

What can you learn about being on a team, or leading a team?

Ship it:

Why, other than learning?

How polished is the product?

What else is like it on the market?

Was the cost low compared to expected value?

What upgrades were made from the prototype?

Chapter V

Mandatory part

Take a look at this picture:



Make the project complete by polishing up the prototype.

Make the project inline with the 42 program, by programming the project!

Make the project presentable, and be ready to present.

Sound easy?

Make it harder.

The value of the project is relative to the size of the team,
the opinions of the judges when seeing the presented product,
and the technical complexity of the build.

Chapter VI

Bonus part

Once you are happy with your product, programming and presentation...

What does the next version look like to you?

How much faster, and cheaper could you create the product again?

Anything you can think of...

Bonus points will not be rewarded due to the scaling nature of this project.

That being said,
the points brought up above could be useful...

Chapter VII

Turn-in and evaluation

Turn your work in using your `git` repository, as usual.
We expect to see code since we expect to see programming.
Have your project ready to showcase for defense.
More details will be provided after the due date.