Purpose
Our goal is to revitalize the currently abandoned Torre David in Caracas, Venezuela to improve the quality of the community by increasing green infrastructure, water features, and access to public transportation.

Location: Torre David, Caracas, Venezuela
The Tower of David was originally funded by a Venezuelan banking firm in the 1980s, but with the crash in the price of oil, the building ended up not being funded properly. The building has been abandoned in recent years and it has become a symbol of the economic collapse and failure in the Venezuelan government. The building has been inhabited by thousands of homeless over the years. The government is currently evicting homeless from the building into other shelters outside the city.

The Project
We will revitalize the lower portion of the tower which was originally designed to be the central atrium of the building. Turning the currently abandoned atrium into a cultural meeting place with cafes, museums, and other accommodations will hopefully cause investors to further develop the tower behind the atrium. This will change the perception for all of Venezuela and we hope that our initial investment will transform the Tower of David from a blemish to the country to a sign of hope and transformation.

Project Team
Ana Carreon
Lead Architect
Muhammad Evans
Lead Engineer
Madison Schlaff
Design & Interior
Victor Johnston
Landscape Architect
Nicolette Beguerisse
LEED & Sustainability
Josue Castillo
Structural Engineering

Our Design
Our building will feature cutting edge technology and building tactics. Every door will be automated, and every floor will have modern restrooms and water fountains.

We will cut cost by utilizing more cost-effective options such as stained concrete instead of tile. Our building is mostly outdoors so we will only need air conditioning on the first and fourth floors.

In order to break the commonalities between building facades in the area our team has decided to use a mixture of curtain wall and columns. The curtain wall will consist of tempered glass to allow viewing from outside as well as inside while simultaneously keeping a cool temperature inside the building. We choose glass paneling to create a contemporary look along with stone cladded columns circling the building’s circumference every 17.5 feet. The paneling will lay along the entire exterior, showcasing store fronts, art galleries and the various activities taking place within the center.
Additional load assessment
Design team has researched that all floors of existing atrium must have designed for load occupancy category “Public Space” (i.e. 100 psf of live load based on ASCE-07). The newly renovated facility will have similar occupancy and loading category. But roof level will see significantly more live load and superimposed dead load than existing building.

Strengthening of Existing Structure
Design team expects strengthening of roof level framing elements and columns. We prescribe use of Fiber Reinforced Polymer (FRP) or External post tensioning around beams as needed. FRP wrap around column will help achieving extra strength.

Sustainability
Our new and improved building will be able to efficiently sustain itself for many years to come. We will keep our water supply by reusing and repurposing the water in our building and by funneling rainwater from the green roof and garden. The building will generate its own power along with having conventional energy with large solar panels along the sides. We plan to add on to our building in the future to make sure it ages gracefully and doesn’t fall behind. We will also insulate the building so that power can be conserved wherever possible.

Our structure, Torre David, is LEED Silver, due to us having an efficient way to reduce the parking footprint. Having a sustainable site by using our open area that we have, helping the habitat around, by having a rainwater capture filter, as well as our Indoor environmental quality almost earned us LEED Gold.

Schedule
Total Renovation Duration: 9 months

Budget
Total Renovation Budget: 10.17 Million USD
Cost per sq.ft = 583$/sq.ft

Floor Plans & Interior
Floor 5
- Green roof
- Café
- Study area

Floor 4
- Art gallery featuring local artists

Floor 2 & 3
- Shopping mall

Floor 1
- Food court with local foods and restaurants

Ground Floor
- Fountain
- Atrium
- Welcome Area