PROJECT DETAILS FOR FINAL SUBMISSION

Project	Title:
27°263°	

Student's Full Name: Metasith Bunditwaraphong

Instructor's Full Name:
Joris Putteneers

Course:

Architectural Design 2

Studio Brief Title: Urban Incubators

Short Project Description (100 words max.):

This project reimagines urban living in flood-prone areas of Thailand through adaptive crane structures. Located along the Chao Phraya River, the design features multi-functional floors for rescue operations, markets, living spaces, and livestock. A central floating platform generates electricity with turbines and adapts to rising water levels. The cranes offer a dual purpose: serving as high-rise shelters during floods and transforming into vibrant community spaces during normal periods. By integrating adaptive reuse and urban resilience, this innovative solution promotes sustainable living and enhances community preparedness for climate-induced flooding.

Full Project Narrative/Text Description (300 words max.):

This project offers a creative way for cities in Thailand, like Bangkok, to adapt to flooding caused by rising sea levels. It uses large crane-like structures along the Chao Phraya River, designed to be both shelters during floods and community spaces during normal times.

The cranes have four main levels. The **first floor** is for flood emergencies, helping with rescue efforts and receiving supplies from boats. The **second floor** is split into two sections: the lower part for trading resources and the upper part for markets and fun activities. The **third floor** is for living spaces, using container homes that can be arranged in different ways to create areas for relaxing, playing, and daily life. The **fourth floor** is for raising animals and creating shared spaces for the community.

Between the two cranes is a **floating platform** that generates clean energy using water turbines. This platform rises and falls with the water, staying stable during floods. It can also be used for markets, festivals, and concerts when there's no flooding.

This project focuses on reusing materials, staying flexible, and building communities that can handle flooding. It shows how smart design can help people live safely and comfortably while dealing with climate challenges. This idea can inspire other cities around the world to prepare for similar problems.