


## Final Year Project Showcase Batch-2020 For the Year 2025

Department of Architecture And Planning Name of Programme: Architecture		
1	Project Idea	<p><b>RECONNECTING THE DISCONNECTED!</b>  <b>“Enhancing Collaborative Corporate Workspace: Balancing Building Design with Active Spatial Strategies.”</b></p> <p>Integrating innovative and sustainable Office building design with active spatial strategies that enhances employee’s productivity, and well-being by fostering interaction, flexibility, and inclusivity.</p>
2	Process	<p>Primary Research:</p> <ul style="list-style-type: none"> <li>Site Visits: Observed office environments, conducted surveys and interviews to understand employee needs and workspace impact.</li> <li>Data Analysis: Combined quantitative survey data with qualitative interview insights.</li> <li>Mapping: Used Google Maps to assess access to green spaces and amenities near offices.</li> </ul> <p>Secondary Research:</p> <ul style="list-style-type: none"> <li>Literature Review: Studied history of interior layouts existing research on office sustainability and employee well-being.</li> </ul> <p>Case Studies: Analyzed for research and extracting the findings and outputs for creating a sustainable community-oriented office building. The selected case studies lie in 3 categories.</p> <ul style="list-style-type: none"> <li>Combination of work zones and fun zones.</li> <li>Separate zones to maintain privacy.</li> <li>No community-oriented environment for comparative analysis.</li> </ul> <p>Integration of Sustainability within all these above-mentioned categories.</p>
3	Outcome	<ul style="list-style-type: none"> <li>Designed collaborative office models that enhance employee well-being and reduce isolation.</li> <li>Showed how improved office spaces boost mental health, reduce stress, and raise job satisfaction.</li> <li>Identified sustainable strategies to lower the environmental impact of office buildings.</li> <li>Highlighted how better design fosters communication, teamwork, and creativity.</li> <li>Developed a design framework balancing function, sustainability, and user needs.</li> <li>Introduced a cluster planning model for shared office use, suited to Karachi’s rental trends.</li> </ul>
4	Evidence (Theoretical Basis)	<ul style="list-style-type: none"> <li>Grounded in environmental psychology and workspace theory, the thesis emphasizes how office design directly influences employee well-being, productivity, and communication.</li> <li>Draws from co-working and living office models, which promote flexibility, interaction, and mental health through spatial openness and biophilic elements.</li> <li>Supported by global best practices from case studies (e.g., Google HQ, Bjarke Ingels Group, Alibaba Campus) that show how integrated sustainability and collaborative environments lead to improved performance and satisfaction.</li> <li>Informed by passive design and sustainability theories, including natural ventilation, green infrastructure, and low-energy systems, to reduce environmental impact while enhancing indoor comfort.</li> <li>Aligns with current literature on flexible workspace trends, community-driven office models, and the role of spatial design in mitigating isolation and improving mental health</li> </ul>
5	<p><b>Competitive Advantage or Unique Selling Proposition</b></p> <p>The proposed office design offers a strong competitive advantage by combining cost reduction, sustainable development goals (SDGs), and access to a new market segment. Through the use of modular construction, passive design strategies, and standardized infrastructure systems (HVAC, electrical, plumbing, and structural grid), the model significantly reduces both construction and long-term operational costs. This is especially</p>	

	valuable in dense urban environments like Karachi, where affordability and energy efficiency are critical. The project also aligns with key SDGs, including SDG 7 (Affordable and Clean Energy), SDG 11 (Sustainable Cities and Communities), SDG 3 (Good Health and Well-being), and SDG 13 (Climate Action), by incorporating green roofs, solar shading, natural ventilation, and biophilic design to create healthier and more environmentally responsible workplaces. Additionally, it captures a growing niche market of startups, freelancers, SMEs, and co-working communities by offering a flexible and user-centric alternative to outdated, rigid office layouts. This standardized yet adaptable design framework appeals to developers and businesses seeking scalable, innovative office solutions that support employee well-being, sustainability, and operational flexibility making it a compelling investment opportunity in the evolving corporate real estate market.
<b>a</b>	<p><b>Cost reduction of existing Product</b></p> <p>By Cluster Planning, passive design strategies, and energy-efficient systems, the proposed office model reduces construction, operational, and maintenance costs making it a more affordable alternative to conventional office buildings in high-density urban areas. Also the use of sustainable design factors and materials the cost of energy consumption also reduces.</p>
<b>b</b>	<p><b>Process Improvement which leads to superior product or cost reduction, efficiency improvement of the whole process (e.g. What is the issue is current process and what improvement you suggests)</b></p> <p>ISSUES</p> <ul style="list-style-type: none"> <li>• Overcrowded seating to maximize space, reducing comfort and interaction.</li> <li>• Isolated workspaces that hinder communication and interaction.</li> <li>• The sense of disengagement and isolation caused by narrow, poorly lit corridors.</li> <li>• Poor departmental layout causing compartmentalization and limited flow.</li> <li>• Insufficient natural light and access to outdoor spaces.</li> <li>• The absence of space for relaxation and socialization highlights the importance of employee well-being and productivity.</li> <li>• Rigid and inflexible office spaces limit inclusivity and spontaneous interaction.</li> <li>• Excessive use of energy.</li> </ul> <p>IMPROVEMENTS</p> <ul style="list-style-type: none"> <li>• Developed a prototype office model integrating human-centered design, sustainability, and efficiency.</li> <li>• Aimed to improve both workspace quality and broader social well-being through healthier environments.</li> <li>• Prioritized collaborative zones to boost interaction, well-being, and productivity.</li> <li>• Designed passive cooling strategies.</li> <li>• To introduce multiple offices into one space having shared zones insist of having isolated separate zones.</li> <li>• Also to break the monotony of office buildings and create openness into the office building with multiple views, amenities, breakout zones, social plaza.</li> <li>• Also the strategy was to have open corridors i.e bridges which connects the building and spaces together.</li> </ul>
<b>c</b>	<p><b>Attainment of any SDG (e.g. How it is achieved and why it is necessary for the region)</b></p> <p>SDG 7 – Affordable and Clean Energy: Achieved through passive design, natural ventilation, and energy-efficient systems, reducing dependence on grid electricity vital in energy-deficient regions like Karachi facing frequent power shortages.</p> <p>SDG 8 – Decent Work and Economic Growth: Supported by designing flexible, collaborative workspaces that enhance productivity and innovation necessary for fostering local entrepreneurship and attracting diverse professional talent.</p> <p>SDG 3 – Good Health and Well-being: Promoted by integrating natural light, green spaces, and ergonomic layouts crucial in dense urban settings where poor indoor environments often lead to stress and mental fatigue.</p> <p>SDG 13 – Climate Action: Addressed by using green roofs, shading devices, and sustainable materials to reduce carbon footprint essential in climate-vulnerable areas prone to heatwaves and urban heat island effects.</p>
<b>d</b>	<p><b>Expanding of Market share (e.g. how it expand and what is the problem with</b></p> <p>Market share can be expanded by offering flexible, sustainable, and user-centric office designs that cater to the growing demand for healthier, eco-friendly workspaces. This approach appeals to modern businesses seeking productivity, well-being, and environmental responsibility.</p> <p>The current market problem lies in outdated, generic office layouts focused solely on space maximization, lacking adaptability, sustainability, and user engagement. In regions like</p>

	the current market	Karachi, most rental office spaces are poorly designed, energy-inefficient, and fail to meet evolving workforce needs limiting appeal to high-value tenants and progressive companies.
e	<b>Capture new market</b> (e.g. Niche market or unaddressed segment)	This project targets a niche market of startups, freelancers, and interdisciplinary professionals seeking flexible, sustainable, and collaborative workspaces a segment largely ignored by conventional office developers in cities like Karachi. By offering modular, eco-conscious office units with shared amenities and customizable layouts, the design appeals to small-to-medium enterprises (SMEs), co-working operators, and businesses prioritizing employee well-being and environmental responsibility unlocking a growing but underserved market.
f	<b>Any Environmental Aspect</b> (e.g. carbon reduction, energy-efficient, etc.)	The design incorporates passive cooling, natural ventilation, and energy-efficient systems to significantly reduce carbon emissions and lower reliance on artificial HVAC. Features like green roofs, shading devices, and daylight optimization improve thermal performance and minimize energy consumption critical for combating urban heat and promoting sustainable development in dense cities like Karachi.
g	<b>Any Other Aspect</b>	<b>Social and Cultural Aspect:</b> The design fosters community interaction and workplace inclusivity by creating shared, adaptable spaces that reflect local work habits and social dynamics. It encourages cross-disciplinary collaboration while addressing the cultural need for communal environments, making it more relevant and accessible to diverse user groups in the regional context.
6	<b>Target Market</b> (Industries, Groups, Individuals, Families, Students, etc) Please provide some detail about the end-user of the product, process, or service	<ul style="list-style-type: none"> <li>Industries: Tech, design, finance, and education sectors needing flexible, sustainable workspaces.</li> <li>Groups: Startups, SMEs, and co-working communities seeking adaptable and collaborative environments.</li> <li>Individuals: Freelancers and remote workers who require comfortable, productive office settings.</li> <li>Families: Indirect beneficiaries through improved employee well-being and work-life balance.</li> <li>Students: Young professionals and interns needing affordable, entry-level professional spaces.</li> </ul>
7	<b>Team Members</b> (Names & Roll No.)	<b>Iqra Khan</b> <b>AR-026</b>
8	<b>Supervisor Name</b>	<b>Ar. Saadia Bano</b>
9	<b>Supervisor Email Address</b>	<b>saadia.bano.7@cloud.neduet.edu.pk</b>
10	<b>Pictures (If any)</b>	





# GROUND FLOOR PLAN



SCALE 1'-0" = 1/16"



CONNECTION THROUGH BRIDGE



EMPLOYEE'S ENTRANCE



### SCREENING TO AVOID DIRECT SUNLIGHT



SUNKEN PLAZA



**SOLAR PANELS AS SHADES**



COLL