American International University – Bangladesh
Faculty of Engineering
Department of EEE & CoE

MICROPROCESSOR & EMBEDDED SYSTEM PROJECT PROPOSAL FORM

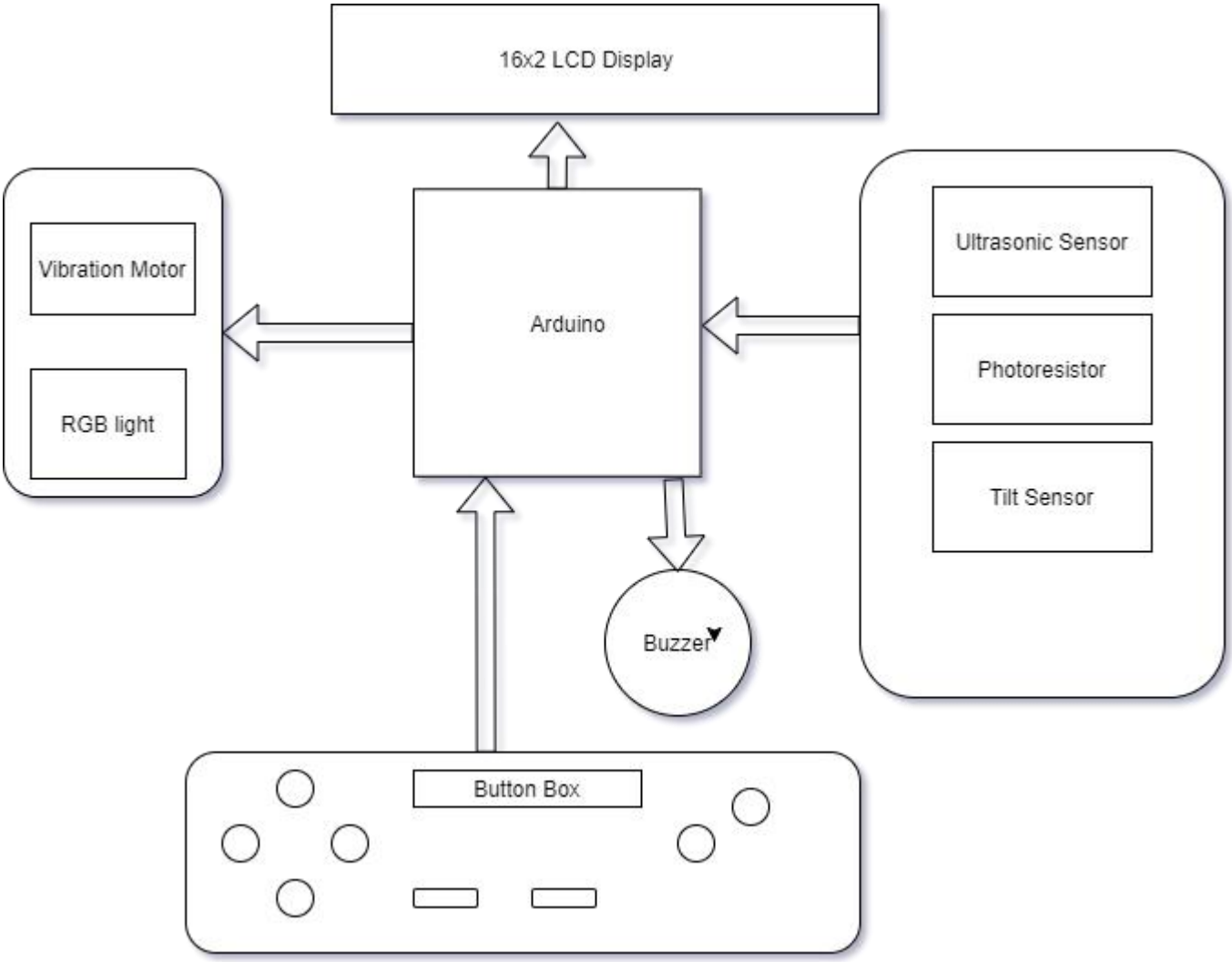
SEMESTER: Fall 2020-2021

PROJECT TITLE: Assistive technology for Occupational therapist to induce fine motor skills and gross motor skills.

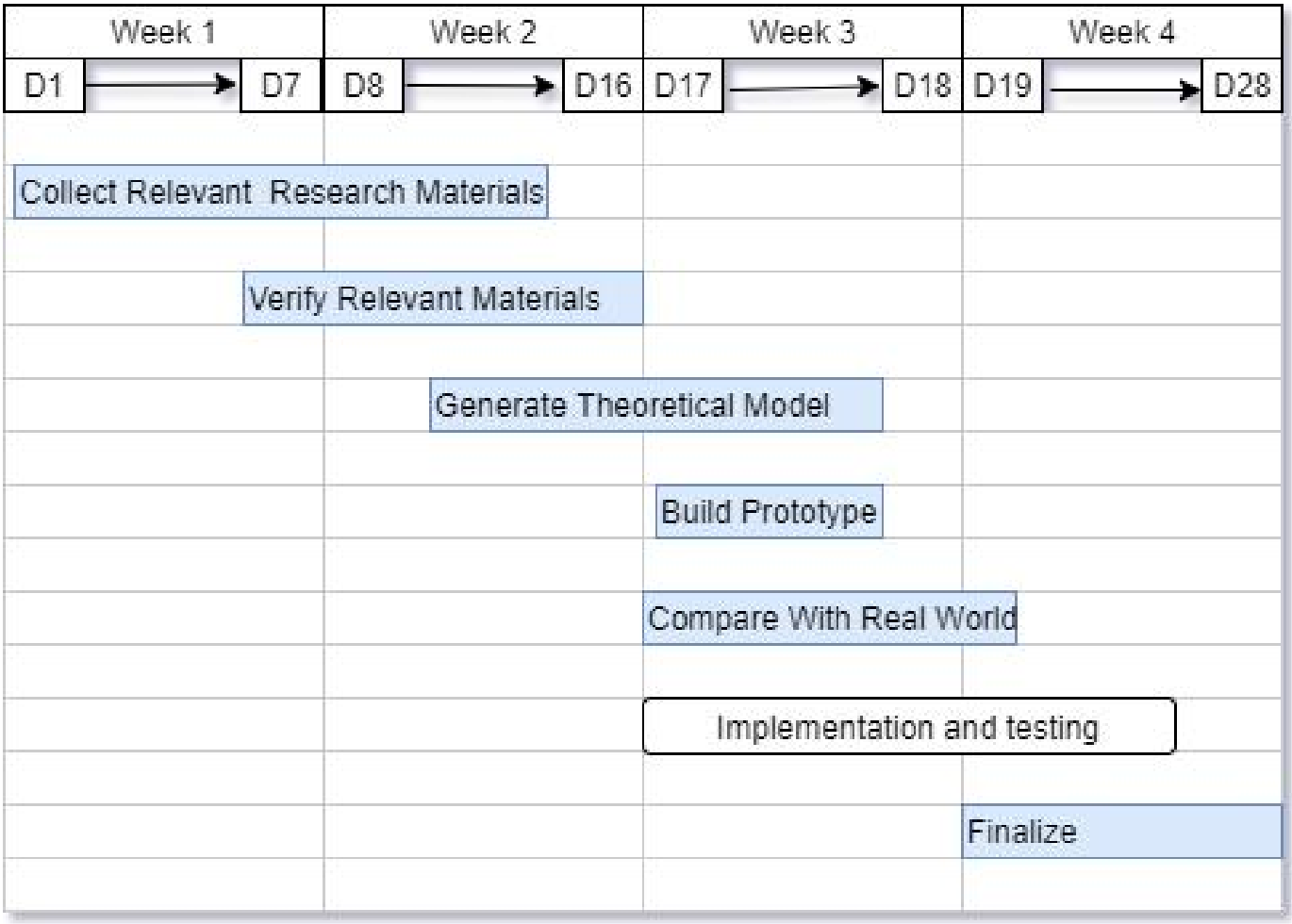
In general there are various types of people with various skills providing services to the community, but all people do not have the same level of ability. However, among these people some lack cognition, some lack kinesthetic learning or tactile-learning[4], some lack interpersonal or intrapersonal skills to a certain degree. However they all deserve to live equally with other people in the society. Therefore Occupational Therapist[1] aids them with their disabilities. This aid can be Mental[9] , Physical[5][8], Metaphysical, Spiritual etc. However Occupation therapists cannot solve everything by themselves. Sometimes various technologies need to be introduced to ease the process. One such aid is called assistive technology[2][3]. The problems that we are focusing on are kinesthetic intelligence and its imbalance due to the presence of inefficient organic muscle structure or cerebellum[6][7] inefficiency which lead to bad voluntary muscle coordination.

Our Capstone project will assist Occupational therapists to help induce fine motor[11] skills and gross motor[10] skills as needed using simulation. Our capstone will will deal with these problems using microcontroller based[12][13][14] approach i.e. arduino.

Model/Experimental Design (Block diagram)



Project Timeline (Gantt Chart)



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COMMENTS BY COURSE TEACHER:

COURSE TEACHER'S NAME **COURSE TEACHER'S SIGNATURE**
DATE

GROUP MEMBERS

(Maximum 10 students are permitted to carry out a single Project. However, depending on the capability of the students, 8 number of students may be allowed but not less than that)

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REMARKS (for OFFICE use only)	