

GLDM 2014 Technical interview Score Sheet

Team name _____, Dance/ Theater _____, Judge's initials _____

Electronic circuit design: Protection circuit, control circuit, and circuit design.	
Open-corrector, protection circuit, etc. are installed for LEDs light-control circuit Not installed=0; Installed, but design value is wrong=1/3; Circuits are designed with consideration for its heating=4.	/4
LEDs light-control circuit has functions for light modulation Reward a circuit which can express the strong and weak lights	/3
Reliable and robust assembly have been addressed (eg. What have you done to prevent your circuit from shot-circuit and leak? Have you done wiring and soldering with universal board and such? Have you considered risk management and insulating?)	/3
Sub-total	/10
Appearance: decoration, costume, stage scenery, props.	
costumes/props/scenery by LEDs are innovative and well-made Interesting/innovative use of materials/costumes by LEDs/props/scenery are designed and made by the students (not "ready-made").	/2
Technical extra score: e.g. lights/moving parts/ sound or light effects used on scenery/props. Reward dynamic more than static representations and innovative use of technology.	/3
Sub-total	/5
Innovative use of technology: Electronics.	
Design and construction of circuit Using of the GR-SAKURA board with understanding how to use it. =1/2; Some home built circuitry used alongside the GR-SAKURA.=2; Create of a home built shield for GR-SAKURA and used it. =3.	/3
Understanding of electronics used Understands operation of electronics (inputs, outputs, power, memory, processors, communications, sensors etc.). e.g. What is the function of each board? How are the controlling of LEDs (hardware)? How is supply of electric power?	/3
Innovative use of technologies to aid performance (e.g. communication between microcomputers to trigger events, keeping in sync with other microcomputers, novel use of technologies such as built-in timer to monitor duration of performance etc.)	/4
Sub-total	/10
Sensors.	
Understanding for electronic devices used to microcomputer board. h	/4
Effective use of sensors that aid the performance eg programming to respond to sensors, using sensors to trigger next part of the performance, how effective are the sensors. Sensors must be effective in affecting the performance. No sensors used = 0	/4
Sub-total	/8
Programming.	
They can explain, describe and understand their program and programming language(s): (eg. What does this section of program do? If I changed this command what effect would that have? What does this feature of the language do? What is difficult point when you have programmed? Why did they choose that programming language?) No program shown = 0	/3
They are able to explain connections between the program and their performance (eg: How do you get your LEDs lighting to synchronize to music? If it performs in a Theatre style, how is the lighting programming related to the music? Limited programming so that LEDs are vaguely in time with music = 1; LEDs programmed in full sync. with the music or performance = 3.) No program shown = 0	/3
Complex, innovative or original programming used appropriate to age and level of expertise (e.g. Simple commands = 1; Use of loops, nested sections, bifurcation, structure, original modules= 2; Use of interrupts/innovative programming = 3) No program show= 0	/3
Sub-total	/9
Team Work and Evidence of Authenticity.	
Teams bring all their microcomputer, props/scenery, electronic devices and programs (printed or on laptop) to the technical interview plus a completed "GLMD Technical Sheet". Teams can demonstrate the microcomputer board/props/scenery etc.	/2
Evidence of authenticity and evolution. Students should be prepared for a interview to discuss ideas tried and discarded, the progressive evolution of their design and original ideas and problems encountered and solved.	/3
Team shared the work and collaborated as a team (eg: How did you share the tasks? How is communicate method in the team? How many were really active in mounting circuits or programming? How did they solve problems as a team? Did they have sub-teams? Ask how the team has managed to complete multiple tasks. Did they get any help/support from adults or/and friends? If yes, ask what/how)	/3
Sub-total	/8

TOTAL SCORE

/50

Recommend for awards

Programming Construction of microcomputer board Entertainment Electronics

Recommend for awards _____

GLDM 2014 Performance Score Sheet

Team name _____, Dance/ Theater _____, Judge's initials _____

Choreography and Story-telling	
DANCE>>LEDs performance used interesting, engaging and/or artistic dance movements	/2
Tehter >>LEDs performance used interesting and/or engaging lighting which told a story	/2
DANCE>>LED lights rhythmically to the music: LED lights do not match the music = 0; some match to the music = 1/2; complements the music = 3.	
Theatre>>LED lights told a story whilst moving to music: LED lights do not match the music = 0; some match to the music = 1/2; complements the music = 3.	/3
Dance>>Work made use of the allocated dance space creatively to enhance the dance	
Theatre>>Work made use of the allocated dance space creatively to tell a story	/2
Included more difficult movements/sequences with LED combination as the team took risks LED lights perform basic movements = 1; Examples of performance to be rewarded: coordination between multiple work, widely dynamic range of the strong and weak light, sequencing LED lights to an event, etc.	/3
Sub-Total	/10
Entertainment Value	
Performance engages the audience: An overall theme and atmosphere was created, exciting, entertaining, enthralling, humorous, etc.	/3
Props, scenery, humans costumes, human interaction or dancing complemented LEDs performance: Does interaction of team members, props and scenery ADD to LEDs performance or DISTRACT from it?	/3
Work appearance complements the performance	/2
Technical production: Production by LED lights, acoustic effect etc. are complements the performance.	/2
Sub-Total	/10
Explanation and material of presentation in a introduction of performance.	
Introduction use of setup to explain the technologies used in the performance	/2
Digital presentation used to enhance robotic performance: Reward creative presentations that enhance the overall performance.	/4
Sub-Total	/6
Sensors used in the performance	
Sensors used in the performance as described in the technical interview: Using optical sensor in getting started, communication among microcomputer etc.	/2
Sub-Total	/2
Execution of performance	
LEDs were reliable and performed as expected (did not 'go wrong')	/3
Props, scenery including costumes and decorations were stable and did not fall apart	/3
human intervention, human stays within the defined area, and within the allotted time (including restarts), marks are removed for: <ul style="list-style-type: none"> • Human intervention: -1 for each unplanned human contact. • Restarts: -1 for each restart (excluding music miscues or factors outside control of team). • Allotted time: 5 mins max: dance > 1 min, < 2 mins. Reduce score by 1 for every 10 sec over 5 min overall. 	/6
Sub-Total	/12
Marks allocated at the judge's discretion	
Reward creative, innovative, entertaining performance demonstrating an inspiring or innovative use of technologies. Use notes below to briefly explain reason. /10	/10
Sub-Total	/10

TOTAL SCORE

/50

Recommend for certificate

Programing

Construction of microcomputer board

Entertament

Electronics