Judges' 2018 Engineering Notebook Score Sheet
Purpose: To document the process used to design, build, and test the robot. (30 pts.)

	Research Paper (4 pts.)				Possible Points	Points Awarded
Correla	ation between the game and how the science/technology is being used at a com	pany/inc	dustry/researc	h lab in the te	am's state or	region
8-10	In-depth discussion of how this year's game theme relates to industry in t	his regio	on.	THE HILLION	Juni o State of	region
4-7	General discussion of how this year's game theme relates to industry in the			7.11		
1-3	General discussion of this year's game theme, but no ties to the region			0 No discu	ssion of gam	e theme.
Comm	nents:				10	16
Any rel	ated information of the game theme such as history, famous inventor(s), major	milaetar	and of o	-		
4-5	In-depth discussion of history and people related to this year's game them		ies, etc.			
2-3	General discussion of history and people related to this year's game them					
1	Some mention of history or people.	E.	- 1	o I Maralian		1. 6
Comm				0 No discu	ssion of relat	ea into
					5	5
Analysi	s of the game theme/problem & related technology's impact on the human expe	rience,	our needs, ad	aptations, and	d progress wit	h solutions.
4-5	In-depth historical account of the effects to human experience, needs, add	ptation	and progress	s toward solu	tions.	
2-3	Some discussion about the effects of the theme/problem/technology on h	uman e	xperiences, n	eeds, adapta	tions or prog	ress.
1	Mentioned the effects to human experience, needs, adaptation or progres	s. O	No mentio	n of history/e	effects to hur	nanity.
Comm	ents:					
					5	5
Creativi	ity in linking the game to appropriately related science content					17
8-10	Very creative in linking this year's game theme to other science/technolog	у.				
4-7	Attempted to link this year's game theme to other science/technology.					
1-3	Mentioned other science/technology.	0	No discuss	ion of other s	cience/techn	ology.
Comm	ents:				10	10
Proper f	formal writing - Proper use of grammar & composition throughout; source ci	ations I	seed to mather	information:	within 2.5 no	no limit
8-10	Very few grammar mistakes/misspellings, included citations, 2-5 pages.	aciono c	soca to gauter	inomiauon,	within 2-5 pa	ge mint
4-7	Noticeable grammar mistakes/misspellings or did not include citations, 2-5	nages				
1-3	Many grammar mistakes/misspellings, no citations, or not within 2-5 pages		10	Incompre	ehensible or r	niccina
Comme			7 7 7	, Incompre	THE ISSUE OF I	missing.
		was we			10	10
	Design Process (17 p	ts.)			210 C 10 10 10 10 10 10 10 10 10 10 10 10 10	
Impleme	entation of the Engineering Design Process (Evidence that the engineering de	sign pro	cess was effe	ctively used)		THE I
21-25	Process is explicitly identified; steps are obvious and explanation is thorough	gh.			ALC II	-
16-20	Process is identified; steps are discernible and there is some explanation.		So			
11-15	Process is not identified; there is some discussion of a design process.	6-10	Discussion	of process is	minimal.	
1-5	You can tell there was a design process of some sort.	0	No discern			
Comme					25	25
Brainsto	rming Approaches - How well organized and productive was the brainstorming	approac	:h? How we	II was it docu	mented?	V2 67/11
21-25	Approach is explicitly identified, organization &productivity are obvious, ex	planati	on is thoroug	h discussion	of how decis	ions made
16-20	Approach is identified, organization and productivity are discernible, there	is some	explanation	11, 41364331011	Of HOW decis	ions made.
11-15	Approach is not identified, there is some discussion of brainstorming.	6-10		of approach	is minimal	7 7
1-5	You can tell there were ideas generated.	0		ble brainstor		
Comme			1 NO discerni	DIE DI AITISTOI	Tilling.	r
	7				25	25
Analytica	al evaluation of design alternatives - Use of analytical and mathematical skills in	n decidir	ng upon and i	mplementing	design alterna	atives
21-25	Evaluation is explicitly identified, analytic/mathematical approach is obvious				ed.	
16-20	Evaluation is identified, analytic/mathematical approach is discernible, alte	rnative	designs are i	dentified.		
11-15	Evaluation is not identifiable, alternative designs are identified.	6-10	Discussion	of alternative	designs is m	inimal.
1-5	You can tell there were alternatives.	0		ble evaluatio		
Comme	nts:				25	25

Offensi	ve and defensive evaluation - Analysis of gaming strategies and design e								
21-25	Evaluation of offensive/defensive strategies is explicitly identified, go				cussion sho	ws a deep			
16-20	knowledge of the game.								
11-15	Evaluation is identified, goals are discernible, discussion shows a knowledge of the game.								
6-10	Evaluation is not identified, there is some notion of goals and game knowledge. Discussion of goals and game knowledge are minimal.								
1-5	There is some slight mention of strategy.	0	No	discernible evaluation.					
Comm		0	110	uiscernible evaluation.		105			
					25	25			
	re Development Process (Evidence that a software development pr				5.000				
21-25	Process is explicitly identified; steps are obvious and explanation is t					explained.			
16-20 11-15	Process is identified; steps are discernible and there is some explana	tion. Sc							
11-15	There is some discussion of a development process or design metho	as.	6-10	Process is mentioned but					
	You can tell there were some software design methods used.		0	No discernible software of	developmen	t process.			
Comm	510111011110000			::	25	0			
Safety -	Evidence that safety training occurred and safe practices were followed	to preve	nt stud	ents' misuse of tools and ot	her devices/	equipment			
	result in personal injury or damage to property	**************************************	THE SALE			to Durant			
17-20	Clear evidence that safety training occurred, clear evidence that the		erified	safety procedures were foll	owed.				
13-16	Clear evidence of safety training, some evidence procedures were ve								
9-12	Some evidence of safety training, some procedures were verified.	5-8		ne evidence safety training,	no verifying	procedur			
1-4	Safety was mentioned; unsafe methods might be visible in photos.	0		mention of safety.					
	comments: Clear evidence that the team had safter training 20 20								
Support	Documentation - Team organization, meeting minutes, CAD/other drawing	igs, pho	tos, tes	at results, etc. that support t	he main doc	ument (max			
20 doub	le -sided pages); +5pts bonus for National Registry proof,	The late	I in	100 A	MON.				
16-20	Clearly identifies ALL categories mentioned above; references made		imary	document.					
11-15	Identifies items from the list above; but missing one or two categories								
1-5	interest to the stream of the								
+5 Provided National Registry proof (e.g., order#s) per team member 0 No items from listed categories are included.									
Comme	DIG 1401 HIOWAY HOWINIPON TEGIN				25	80			
87/3/5/5/	Overall Quality and completene	ss of	Note	book (9 pts.)					
Organi	ration and appearance - Table of contents, summary, page numbe	rs, discu	ission (of evaluation points, linkag	ge to appen	dices			
21-30	Well organized, looks good, includes Table of Contents, summary, pa								
21-30	score sheet), linkage to appendices.			·					
11-20	Reasonably organized, looks good, missing one or two items from list	t above							
1-10	Poorly organized, no attention to looks, missing multiple items from	list abo	ve.	0 Disorganized, miss	ing most ite	ms.			
Comme	ints: Missing discussion of evaluation is	215	00	rendix	30	91			
Adheren	ce to specifications	(TES ES)	4 OVP	A DE LOVIE SACEL HARVING	STEEL COPE	01			
1" marg	heet and/or title page that identifies the school team name, teacher contact inf ins, Business font no smaller than 12 pt., double-spaced (single spaced ok option, Softcopy Format = PDF or Hardcopy in Standard Binder, 35 one-sided	in tables	and ou	tlines);	page max for	appendices			
21-30	Adheres to the specifications listed above.								
11-20	Violates one of the specifications listed above.								
1-10	Violates two or three of the specifications listed above.	0	Viol	ates for or more specs.					
Comme	nts: Adhered to all specifications				30	30			
Quality	f content - Well written, clear photo labels, lack of extraneous material such a	s comm	unity or	promotional efforts, spirit deve		m building			
21-30	Everything is well written/clear/logical, everything is clearly labeled,	no exce	ss mat	erial.	- opinoni, tou	Dunding			
11-20	You can follow everything with some effort, one or two things that a								
1-10	Hard to understand in places, labels missing in places, unnecessary m			0 Very difficult to follow,	unnecessar	v material			
Comme					30	29			
SCORE	CALCULATION and Additional Comments:	Total			300				
		, otal				200			
	1				÷10	÷10			
		Final	Score		30 max	20.0			
Judgo -	ame/number (print): 10rdan POWEN								

school: Gruyer High school

Team Number: # 0907

Purpose: To document the process used to design, build, and test the robot. (30 pts.) Possible Points Research Paper (4 pts.) **Points** Awarded Correlation between the game and how the science/technology is being used at a company/industry/research lab in the team's state or region 8-10 In-depth discussion of how this year's game theme relates to industry in this region. 4-7 General discussion of how this year's game theme relates to industry in this region. 1-3 General discussion of this year's game theme, but no ties to the region 0 No discussion of game theme. Comments: 10 Any related information of the game theme such as history, famous inventor(s), major milestones, etc. In-depth discussion of history and people related to this year's game theme. General discussion of history and people related to this year's game theme. 2-3 1 Some mention of history or people. No discussion of related info Comments: Analysis of the game theme/problem & related technology's impact on the human experience, our needs, adaptations, and progress with solutions. In-depth historical account of the effects to human experience, needs, adaptation and progress toward solutions. 2-3 Some discussion about the effects of the theme/problem/technology on human experiences, needs, adaptations or progress. Mentioned the effects to human experience, needs, adaptation or progress. 0 No mention of history/effects to humanity. Comments: Creativity in linking the game to appropriately related science content 8-10 Very creative in linking this year's game theme to other science/technology. 4-7 Attempted to link this year's game theme to other science/technology. 1-3 Mentioned other science/technology. 0 No discussion of other science/technology. Comments: 10 Proper formal writing - Proper use of grammar & composition throughout; source citations used to gather information; within 2-5 page limit Very few grammar mistakes/misspellings, included citations, 2-5 pages. 8-10 4-7 Noticeable grammar mistakes/misspellings or did not include citations, 2-5 pages. 1-3 Many grammar mistakes/misspellings, no citations, or not within 2-5 pages. 0 Incomprehensible or missing. Comments: 10 Design Process (17 pts.) Implementation of the Engineering Design Process (Evidence that the engineering design process was effectively used) 21-25 Process is explicitly identified; steps are obvious and explanation is thorough. 16-20 Process is identified; steps are discernible and there is some explanation. Process is not identified; there is some discussion of a design process. 11-15 6-10 Discussion of process is minimal. 1-5 You can tell there was a design process of some sort. No discernible design process. Comments: 22 Brainstorming Approaches - How well organized and productive was the brainstorming approach? How well was it documented? 21-25 Approach is explicitly identified, organization & productivity are obvious, explanation is thorough, discussion of how decisions made. 16-20 Approach is identified, organization and productivity are discernible, there is some explanation. 11-15 Approach is not identified, there is some discussion of brainstorming. 6-10 Discussion of approach is minimal. 1-5 You can tell there were ideas generated. No discernible brainstorming. Comments: 25 Analytical evaluation of design alternatives - Use of analytical and mathematical skills in deciding upon and implementing design alternatives 21-25 Evaluation is explicitly identified, analytic/mathematical approach is obvious, alternative designs are explained. 16-20 Evaluation is identified, analytic/mathematical approach is discernible, alternative designs are identified. 11-15 Evaluation is not identifiable, alternative designs are identified. 6-10 Discussion of alternative designs is minimal. 1-5 You can tell there were alternatives. 0 No discernible evaluation. Comments: 20

25

Offens	ve and defensive evaluation - Analysis of gaming strategies and design				W-1-1					
21-25	Evaluation of offensive/defensive strategies is explicitly identified, knowledge of the game.	goals of	this tea	m are clearly identified, dis	scussion sho	ws a deep				
16-20	Evaluation is identified, goals are discernible, discussion shows a knowledge of the game.									
11-15	Evaluation is not identified, there is some notion of goals and game knowledge.									
6-10	Discussion of goals and game knowledge are minimal.									
1-5	There is some slight mention of strategy. O No discernible evaluation.									
Comm					25	22				
	re Development Process (Evidence that a software development p				P (1802 all vol.	WWW.972-06				
21-25	Process is explicitly identified; steps are obvious and explanation is	thoroug	h. Desig	gn methods utilized are ide	ntified and	explained.				
16-20	Process is identified; steps are discernible and there is some explan		me de	sign methods are discussed	l					
11-15	There is some discussion of a development process or design methods. 6-10 Process is mentioned but minimal detail.									
1-5	1-5 You can tell there were some software design methods used. 0 No discernible software development process.									
Comm	10 software all cosh Impl	LMI	tah	on apparently	25	15				
that ma	Evidence that safety training occurred and safe practices were followed y result in personal injury or damage to property	to preve	ent stud	ents' misuse of tools and of	31.03.35.35.3	equipment				
17-20	Clear evidence that safety training occurred, clear evidence that the		erified :	safety procedures were fol	lowed.					
13-16	Clear evidence of safety training, some evidence procedures were v	erified.		W .10						
9-12	Some evidence of safety training, some procedures were verified.	5-8	Som	e evidence safety training,	no verifying	gprocedur				
1-4	Safety was mentioned; unsafe methods might be visible in photos.	0		mention of safety.		.,				
Comm	ents:	_	-		20	10				
Support	Documentation - Team organization, meeting minutes, CAD/other draw le -sided pages); +5pts bonus for National Registry proof,	ings, pho	tos, tes	t results, etc. that support t		ument (max				
16-20	Clearly identifies ALL categories mentioned above; references made	e from n	riman, (document		A STATE OF THE STA				
11-15	Identifies items from the list above; but missing one or two categories.									
1-5	Includes items from at least 2 categories; but not identified.	6-10	Itom	ns from at least 3 categorie	c ahoun aro	included				
+5	Provided National Registry proof (e.g., order#s) per team member	0								
Commontes										
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Organi		THE RESERVOIR SHAREST CO.	SCHOOL STREET, ST.	Charles and the state of the st	re to annen	dices				
21-30	Well organized, looks good, includes Table of Contents, summary, page numbers, discussion of evaluation points, linkage to appendices Well organized, looks good, includes Table of Contents, summary, page numbers, discussion of evaluation points (e.g. Items on the score sheet), linkage to appendices.									
11-20	Reasonably organized, looks good, missing one or two items from li	st ahove								
1-10	Poorly organized, no attention to looks, missing multiple items from			0 Disorganized, miss	ing most ito	me				
Comme		T HISC GOO	ve.	Disorganized, miss		105				
					30	20				
Cover s 1" marg per Hul	ce to specifications heet and/or title page that identifies the school team name, teacher contact ir ins, Business font no smaller than 12 pt., double-spaced (single spaced of option, Softcopy Format = PDF or Hardcopy in Standard Binder, 35 one-side	k in tables	and ou	tlines);	page max for	appendices				
21-30	Adheres to the specifications listed above.									
11-20	Violates one of the specifications listed above.									
1-10	Violates two or three of the specifications listed above.	0	Viola	ates for or more specs.						
Comme	ints: Good compliance with speci.				30	22				
Quality of	of content - Well written, clear photo labels, lack of extraneous material such	as comm	unity or	promotional efforts, spirit deve	elopment, tea	m building				
21-30	Everything is well written/clear/logical, everything is clearly labeled	, no exce	ss mat	erial.						
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1-10	Hard to understand in places, labels missing in places, unnecessary	material	. 1	0 Very difficult to follow,	unnecessar	v material.				
Comme					30	25				
SCORE	CALCULATION and Additional Comments:	Total			300	240				
					÷10	÷10				
		Final.	C			21				
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Judge n	ame/number (print): Hector Siles		, ,	4:						
Team N	umber: 0807 School: Wy	er	Hig	h School.						

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Offensive and defensive evaluation - Analysis of gaming strategies and design	C. Bullion and Co.	core		The same of the later first	2		ALC: THE PARTY		
21-25 Evaluation of offensive/defensive strategies is explicitly identified, g	goals of th	s teai	m are c	learly identifie	d, discussi	on sho	ws a deep		
	knowledge of the game.								
	Evaluation is identified, goals are discernible, discussion shows a knowledge of the game. Evaluation is not identified, there is some notion of goals and game knowledge.								
6-10 Discussion of goals and game knowledge are minimal.	knowledg	e.							
	10	NI.	11	tala a al al					
- I state of the s	0	NO C	aiscerni	ble evaluation.					
Comments:						25	\triangleleft		
Software Development Process (Evidence that a software development process)	rocess wa	s offe	rtively	usod)	adjet kraji	12.1122	SEAL PROGRAM		
21-25 Process is explicitly identified; steps are obvious and explanation is					e identifie	d and s	volsined		
16-20 Process is identified; steps are discernible and there is some explana	ation Som	e des	sign me	thods are disci	iccod.	u anu e	xpiairieu.		
11-15 There is some discussion of a development process or design metho		-10		ss is mentione		mal do	tail		
1-5 You can tell there were some software design methods used.	743.			scernible softw					
Comments:			140 01	scerrible soltw	are deven	pinen	/		
Somments.						25	1		
Safety - Evidence that safety training occurred and safe practices were followed	to prevent	stude	ents' m	suse of tools a	nd other de	evices	equipment		
that may result in personal injury or damage to property	THE COLUMN	1			CI RESULT		oquipinone		
17-20 Clear evidence that safety training occurred, clear evidence that the	team ver	fied s	safety p	rocedures wer	e followed	1.			
13-16 Clear evidence of safety training, some evidence procedures were vidence									
9-12 Some evidence of safety training, some procedures were verified.	5-8	Som	e evide	nce safety trai	ning, no ve	erifying	procedur		
1-4 Safety was mentioned; unsafe methods might be visible in photos.	0			of safety.	<i>U</i>				
Comments:						20	15		
Support Documentation - Team organization, meeting minutes, CAD/other drawing	nas photo	s tes	t result	s etc that sun					
20 double -sided pages); +5pts bonus for National Registry proof,	ngo, photo	0, 100		o, oto, that oup	Join the me	iii doce	anient (max		
16-20 Clearly identifies ALL categories mentioned above; references made	from prin	nary c	docume	ent.					
Identifies items from the list above; but missing one or two categori									
1-5 Includes items from at least 2 categories; but not identified.	6-10	Item	s from	at least 3 cate	ories abo	ve are	included.		
+5 Provided National Registry proof (e.g., order#s) per team member	0			om listed categ					
Comments:	·					25	(S		
Overall Quality and completens	f NI		164 (1)	10-4-1	CONTRACTOR IN	N I WING	Market Control		
Overall Quality and completene									
Organization and appearance - Table of contents, summary, page number	ers, discus	sion c	of evalu	ation points, l	inkage to	appeni	dices		
Well organized looks good includes Table of Contents summary no			iconecia	on of evaluation		2.7	STREET, ACT II		
21-30 Well organized, looks good, includes Table of Contents, summary, page 21-30	age numb	ers, d	iscussic		n points (e	.g. Iten	ns on the		
score sheet), linkage to appendices.		ers, d	iscussic		n points (e	.g. Iten	ns on the		
score sheet), linkage to appendices. 11-20 Reasonably organized, looks good, missing one or two items from lis	st above.				n points (e	.g. Iten	ns on the		
score sheet), linkage to appendices. (11-20) Reasonably organized, looks good, missing one or two items from list. 1-10 Poorly organized, no attention to looks, missing multiple items from	st above.		0	Disorganized,	n points (e	.g. Iten	ns on the		
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score sheet), linkage to appendices. 11-20 Reasonably organized, looks good, missing one or two items from list. Poorly organized, no attention to looks, missing multiple items from Comments: Adherence to specifications Cover sheet and/or title page that identifies the school team name, teacher contact in 1" margins, Business font no smaller than 12 pt., double-spaced (single spaced ok	st above. list above formation, a	and te	o am num	Disorganized,	missing m	ost iter	ns on the		
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Judges' 2018 Engineering Notebook Score Sheet
Purpose: To document the process used to design, build, and test the robot. (30 pts.)

	Research Paper (4 pts.)				Possible Points	Point
Correla	ation between the game and how the science/technology is being used at a co	mpany/inc	lustry/researc	h lab in the te		region
8-10	In-depth discussion of how this year's game theme relates to industry in	this region	n.			- G. F. S.
4-7	General discussion of how this year's game theme relates to industry in	this regio		- 11	5-3-	. 31
1-3	General discussion of this year's game theme, but no ties to the region		(No discu	ssion of game	theme.
	nents:				10	8
	lated information of the game theme such as history, famous inventor(s), major		ies, etc.			
4-5	In-depth discussion of history and people related to this year's game the				1 4 7	
2-3	General discussion of history and people related to this year's game then	ne.				
1	Some mention of history or people.	7.	(No discus	ssion of relate	d info
	nents:				5	5
	is of the game theme/problem & related technology's impact on the human ex	perience,	our needs, ada	aptations, and	progress wit	n solution
4-5	In-depth historical account of the effects to human experience, needs, a	daptation	and progress	toward solu	tions.	
2-3	Some discussion about the effects of the theme/problem/technology on					
1	Mentioned the effects to human experience, needs, adaptation or progr	ess. 0	No mention	n of history/e	effects to hum	anity.
Comm	nents:				5	3
manal.	iby in linking the game to appropriately a L.C. I					
reativ 8-10	ity in linking the game to appropriately related science content	- 14				
	Very creative in linking this year's game theme to other science/technology	ogy.				
4-7	Attempted to link this year's game theme to other science/technology.		T.,	7		
1-3	Mentioned other science/technology.	0	No discussi	on of other s	cience/techn	ology.
omm	ents:				10	4
roper	formal writing - Proper use of grammar & composition throughout; source	citations u	sed to gather	information;	within 2-5 pa	e limit
8-10	Very few grammar mistakes/misspellings, included citations, 2-5 pages.		J#11 - J 191			S. Altradae
4-7	Noticeable grammar mistakes/misspellings or did not include citations, 2	-5 pages.				
1-3	Many grammar mistakes/misspellings, no citations, or not within 2-5 page	es.	C	Incompre	hensible or n	nissing.
omm	ents:	7.3				
V/03/05/		EXPLANACE DATE	- EDPC HERESHORD YEAR	CONTRACTOR OF THE PARTY OF THE	10	8
	Design Process (17					
	entation of the Engineering Design Process (Evidence that the engineering of		cess was effe	ctively used)	H-49-34-4-1	Applied 6
1-25	Process is explicitly identified; steps are obvious and explanation is thoro					
6-20	Process is identified; steps are discernible and there is some explanation				1 11	
.1-15	Process is not identified; there is some discussion of a design process.	6-10		of process is		
1-5	You can tell there was a design process of some sort.	0	No discern	ible design pr	ocess.	
omm					25	23
10001441961251	orming Approaches - How well organized and productive was the brainstorming			A Source Control of the Control of t	NEW YORK AND ADDRESS OF THE PARTY OF THE PAR	
rainste	offining Approaches - Now Well organized and productive was the brainstoffin	ng approa	ch? How we	was it docu	mented?	Fall Land
21-25	Approach is explicitly identified, organization &productivity are obvious,	explanati	on is thoroug	h, discussion	mented? of how decis	ons mad
.6-20	Approach is explicitly identified, organization &productivity are obvious, Approach is identified, organization and productivity are discernible, the	explanati	on is thoroug	h, discussion	of how decis	ons mad
.1-25 .6-20 .1-15	Approach is explicitly identified, organization &productivity are obvious, Approach is identified, organization and productivity are discernible, the Approach is not identified, there is some discussion of brainstorming.	explanati	on is thoroug explanation	h, discussion	of how decis	ons mad
1-25 6-20 1-15	Approach is explicitly identified, organization &productivity are obvious, Approach is identified, organization and productivity are discernible, the	explanati re is some	on is thoroug explanation Discussion	h, discussion	of how decis is minimal.	ons mad
1-25 6-20 1-15 1-5	Approach is explicitly identified, organization &productivity are obvious, Approach is identified, organization and productivity are discernible, the Approach is not identified, there is some discussion of brainstorming. You can tell there were ideas generated.	explanati re is some 6-10	on is thoroug explanation Discussion	h, discussion of approach	of how decis is minimal.	ons mad
1-25 .6-20 .1-15 1-5 omme	Approach is explicitly identified, organization &productivity are obvious, Approach is identified, organization and productivity are discernible, the Approach is not identified, there is some discussion of brainstorming. You can tell there were ideas generated. ents:	explanati re is some 6-10 0	on is thoroug explanation Discussion No discerni	h, discussion of approach ble brainstor	of how decis is minimal. ming.	5
1-25 6-20 1-15 1-5 ommo	Approach is explicitly identified, organization &productivity are obvious, Approach is identified, organization and productivity are discernible, the Approach is not identified, there is some discussion of brainstorming. You can tell there were ideas generated.	explanati re is some 6-10 0	on is thoroug e explanation Discussion No discerni	h, discussion of approach ble brainstor	of how decis is minimal. ming. 25 design alterna	5
1-25 6-20 1-15 1-5 ommonalytic 1-25	Approach is explicitly identified, organization &productivity are obvious, Approach is identified, organization and productivity are discernible, the Approach is not identified, there is some discussion of brainstorming. You can tell there were ideas generated. ents: cal evaluation of design alternatives - Use of analytical and mathematical skills Evaluation is explicitly identified, analytic/mathematical approach is obvi	explanati re is some 6-10 0 s in decidi ous, alter	on is thoroug explanation Discussion No discerni	h, discussion of approach ble brainstor mplementing s are explain	of how decis is minimal. ming. 25 design alterna	5
1-25 6-20 1-15 1-5 commo 1-25 6-20	Approach is explicitly identified, organization &productivity are obvious, Approach is identified, organization and productivity are discernible, the Approach is not identified, there is some discussion of brainstorming. You can tell there were ideas generated. ents: cal evaluation of design alternatives - Use of analytical and mathematical skills	explanati re is some 6-10 0 s in decidi ous, alter	on is thoroug explanation Discussion No discerni ng upon and in native design designs are id	h, discussion of approach ble brainstor mplementing s are explain dentified.	of how decis is minimal. ming. 25 design alternated.	5 itives
1-25 .6-20 .1-15 1-5 omme	Approach is explicitly identified, organization &productivity are obvious, Approach is identified, organization and productivity are discernible, the Approach is not identified, there is some discussion of brainstorming. You can tell there were ideas generated. ents: cal evaluation of design alternatives - Use of analytical and mathematical skills Evaluation is explicitly identified, analytic/mathematical approach is obvi Evaluation is identified, analytic/mathematical approach is discernible, a	explanati re is some 6-10 0 s in decidi ous, alter lternative	on is thoroug explanation Discussion No discerni ng upon and i mative design designs are id Discussion	h, discussion of approach ble brainstor mplementing s are explain dentified. of alternative	of how decis is minimal. iming. 25 design alternated. e designs is m	5 itives
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	Judges' 2018 Engineering Not	tebook	Score	e She	et			
Offens	ive and defensive evaluation - Analysis of gaming strategies and design	element	s used	to ach	ieve team goals	and c		
21-25	Evaluation of offensive/defensive strategies is explicitly identified, g	goals of	this tea	m are	clearly identified, di	iscussion sho	ws a deep	
	knowledge of the game.							
16-20	Evaluation is identified, goals are discernible, discussion shows a knowledge of the game.							
11-15	Evaluation is not identified, there is some notion of goals and game knowledge.							
6-10	Discussion of goals and game knowledge are minimal.							
1-5	There is some slight mention of strategy.	0	No	discer	nible evaluation.			
Comm	ents:					25	10	
Softwa	re Development Process (Evidence that a software development p	rocess v	vas effe	ective	ly used)	The state of		
21-25	Process is explicitly identified; steps are obvious and explanation is					entified and e	explained.	
16-20	Process is identified; steps are discernible and there is some explana-							
11-15	There is some discussion of a development process or design method	ods.						
1-5	You can tell there were some software design methods used.		0	No	discernible software	developmen	t process.	
Comm	ents:					25	0	
Safety .	Evidence that safety training occurred and safe practices were followed	to prove	nt etuc	lante'	micues of tools and a	ther devices		
that ma	y result in personal injury or damage to property	to preve	ant Stut	leills	illisuse of tools and o	uier devices/e	equipment	
17-20	Clear evidence that safety training occurred, clear evidence that the	team v	erified	safety	procedures were fol	llowed		
13-16	Clear evidence of safety training, some evidence procedures were v				procedures were to			
9-12	Some evidence of safety training, some procedures were verified.	5-8	Som	ne evi	dence safety training	no verifying	nrocedur	
1-4	Safety was mentioned; unsafe methods might be visible in photos.	0			on of safety.	, no vernying	procedui	
Comm			1110		on or surcey.	20	10	
			In	4	the steather arms at		10	
20 doub	t Documentation - Team organization, meeting minutes, CAD/other drawingle -sided pages); +5pts bonus for National Registry proof,	130.0				ine main doci	iment (max	
16-20	Clearly identifies ALL categories mentioned above; references made		rimary	docur	nent.			
11-15	Identifies items from the list above; but missing one or two categori	es.						
1-5	Includes items from at least 2 categories; but not identified.	6-10	Iten	ns froi	n at least 3 categorie	es above are i	included.	
+5	Provided National Registry proof (e.g., order#s) per team member	0	No i	tems	from listed categorie	s are include	d.	
Comm	ents:					25	10	
	Overall Quality and completene	ess of	Note	hoo	k (9 nts)		The Hard	
Organi	zation and appearance - Table of contents, summary, page number	10 C	A CONTRACTOR	41,415acc=6	Market Annual Control of the Control	an to annou	diese	
	Well organized, looks good, includes Table of Contents, summary, page							
21-30	score sheet), linkage to appendices.	age nun	IDE13, U	iiscus:	son or evaluation po	ints (e.g. iten	is on the	
11-20	Reasonably organized, looks good, missing one or two items from lis	st above						
	Poorly organized, no attention to looks, missing multiple items from			0	Disorganized, miss	ing most iter	me	
Comme		noc abo			DisorBurnzed, Illiss	30		
	nce to specifications	MB-Jocs	VI-51 (00	95':1051	THE RESIDENCE OF THE PARTY.	30	22	
	sheet and/or title page that identifies the school team name, teacher contact in	formation	ond to	om ni	mhor		ATITUM.	
1" marc	jins, Business font no smaller than 12 pt., double-spaced (single spaced ok	in tables	and or	itlinee)	· ·			
per Hul	o option, Softcopy Format = PDF or Hardcopy in Standard Binder, 35 one-side	d page n	nax for r	nain s	ection, 20 double-sided	page max for	annendices	
21-30	Adheres to the specifications listed above.	- P-3- II	1001 101 1	1,0,11,0	soupile black	pago max tor	арропаюсэ	
11-20	Violates one of the specifications listed above.							
1-10	Violates two or three of the specifications listed above.	0	Viol	ates fo	or or more specs.			
Comme			1			30	20	
Quality	of content - Well written, clear photo labels, lack of extraneous material such	oc comm	unity or	promo	utional offarts assirit day			
21-30	Everything is well written/clear/logical, everything is clearly labeled,				nonai enons, spirit dev	elopment, tear	n bullding	
11-20	You can follow everything with some effort, one or two things that a							
1-10	Hard to understand in places, labels missing in places, unnecessary n				ery difficult to follow,		, material	
Comme		nateria.		U VI	ery difficult to follow,			
						30	20	
SCORE	CALCULATION and Additional Comments:	Total				300	170	
						÷10	÷10	
		F	C -					
		Final	ocore			30 max	17.0	
ludgo =	name/number (print): Hysman Bostan							
Juuge II	lumber: 0807 School: Guy	/				-		
Toom A	lumber: 0807 School: Guy	^ -	11	C				
reall! IV	School: Clos	W.	17-	2				