Evaluation Sheet Final Project IANNWTF 20/21	Points	Bonus
General	20	10
Task complexity	7	3
--- trivial | - project with code exists | established | replication study is motivated | + not course content | +(+++)new application | ++(++) novel design ideas		
Task motivation	4	
--- not motivated | replication study | +(++) scientifically motivated replication study | +(+++) real life application (prototype)		
Organizational	3	
--- last minute support needed | --- late submission/submission problems | -- no file structure | + early communication | + clean file structure | ++clear communication		
Achievement	6	2
--- no result | - bad result | no/bad result, but extended analysis of why | + limited success | ++ task completed | +++ task completed, analysis of reasons		
Project overhead		5
+(+++) Effort for obtaining dataset | +(+++) obtaining access to specialized equipment/hardware | +(+++) effort with obtaining human related data		
Implementation	20	10
Code status	4	
---- not executable | -- runtime errors, fringe case problems | ++ works smoothly | +++ runs without warnings (without surpressing etc.)		
Readability	5	
---- messy code | ---- spagghetti code | clean code | + readibility in names | ++ good python style | ++ well commented | ++ good tf style		
Efficiency/Streamlining	4	5
--- explicit inefficencies | -- training and data preparation are not handled in parallel | + graph mode tf | +++ well executed graph mode (no eager fallbacks necessary) +++ extended multiprocessing		
Code quality	4	
--- working in place mostly | -- no reusability | - unpythonic design | + usage of functions, classes, layers, models | ++ pythonic style | ++ module structure, .ipynb only where actually useful		
Availability of Code and Data	1	5
- publicly unavaiblable | publicly available (e.g. github) | +++ publicly available and usable for other users (github readme, environment available (.yaml)) | ++++ publically available new datasets etc.		
Runtime Progress tracking	2	
+ User can track progress +++ User can track progress graphically/interactively (e.g. tensorboard)		
Model Design & Training	20	10
General Model Design	12	4
------- inapropriate network design | primitive but correct design (e.g. vanilla cnn, vanilla rnn) | ++ sound design | +++ usage of recent, advanced elements | +(+++++) usage of objects of study		
Optimization procedures	4	2
SGD & momentum / Adam default | + Optimizer actively chosen | ++ measures against overfitting | ++ regularization techniques		
Preprocessing	3	2
--- no data cleaning | ensuring clean data | +++ feature extraction | +++ data enhancement | +++++ advanced data enhancement		
Hyperparameter optimization	1	2
- bad hyperparameters | default hyperparameters | ++ hyperparameters grounded in literature | +(++) hyperparameter optimization		
Documentation	40	20
Task description	4	
--- incomplete | basic explanation | ++ detailed analysis of task		
Summary of related approaches	8	2
----- obviously lacking content | own approach only | +++ related approaches | +++ overview over field/context		
Explanation of model & training choices	10	
----- lacking, missing content | --- unscientific | basic summary, relating to theoretical background of lecture | +++scientific summary | +++scientific explanation of used parts		
Analysis of results and evaluation of performance evaluation	8	2
---- incomplete| basic evaluation | ++ detailed analysis | ++ comparison to other approaches		
Ablation studies		8
+(++++) explanation and analysis of how different elements are responsible for success / failing		
General Documentation	6	3
--- no structure| --- erroneous writing | -- no visualizations | formal style and errorfree writing, clear structure | helpful visualizations | ++ LaTeX | +++ advanced visualizations		
Scientific writing	4	
Fail: plagiarism | --- no citations | - unscientific | minimum necessary citations, vaguely scientific | ++ scientific approach/reasoning/critical approach | +++ extended citations and bibliography		
Presentation		5
+++++ participation in project presentation		
Result	100	50
100 points in total + max 50 bonus points, ++ and -- indicate the importance of criteria		