## Back end: main.py Documentation

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main.add module()
   Add module to database. required in POST request body: SmObjId, PiqYear, PiqSession, whitelisted,
   searchterm
main.add_searchterm()
   Add searchterm to DB, term is supplied in form data
main.admin()
   Administrator front end view
main.app = <Flask 'main'>
main.check_which_saved(modules: list)
   Check which modules are saved, and mark them as either white- or blacklisted accordingly
main.cors = <flask_cors.extension.CORS object>
main.db_config = {'database': 'greenvvzdb', 'host': '127.0.0.1', 'password': 'greenvvzpw', 'user':
'greenvvz'}
main.find_modules_for_course(course: dict)
    Request detail page for course object, add Module subobjects(dicts) as list to given course object
main.find_studyprograms_for_module(SmObjId: int, PiqYear: int, PiqSession: int) \rightarrow list
    Request detail page for module object, add Studyprogrm subobjects(dicts) as list to given module obj
main.flag_module(module_id: int)
   Flag saved module as whitelisted or blacklisted, depending on request.args.get('whitelisted')
main.get blacklist()
main.get modules(whitelisted: bool)
   Get modules saved in the database, either blacklisted or whitelisted, as JSON response
main.get_searchterms()
   get all search terms from DB
main.get_studyprograms()
    Get distinct studyprograms associated with modules in the whitelist
main.get_studyprograms_modules()
   Get Module-Studyprogramids assocations as a dictionary
main.get whitelist()
main.hello world()
   Hello World test view
main.info()
   Information about the API
main.public()
   Public front end view
main.remove_module(module_id: int)
```

remove module from database by id

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main.remove_searchterm(searchterm_id: int)
    remove searchterm from DB via id

main.require_appkey(view_function)
    decorator for checking the api-key, making unauthorized requests impossible

main.save_studyprograms_for_module(module_id: int, studyprograms: list)
    Save studyprogams for module in database, establish relationship

main.search()
    get modules based on search terms, marking those already on white- and blacklist

main.search_upwards()
    Find course matches, then find containing modules, # and containing study programs

main.update()
    Update saved modules to match their course catalogue counterparts, be there any changes

main.wrap_execute_for_modules_in_course(course)
```

Wrapper function to be able to parallelize finding studyprograms for modules