PRE-INCUBATION FRAMEWORK OF SOFTWARE STARTUP USING GROW COACHING MODEL, BLOCK SCHEDULING AND DAILY SCRUM

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ABSTRACT

The purpose of this research is to produce a framework for pre-incubation activities to improve the understanding and ability of tenants to develop software. In this pre-incubation activity, all tenants were students who participated in the "Merdeka Belajar-Kampus Merdeka (MBKM)" program, an entrepreneurship (startup) sub-program. The objects studied were 14 people, which were divided into 3 groups. Where the problem they face is the gap between the knowledge they receive in class and the software development needs of software startups. At startups, they are required to be able to develop software in a fast time, while the results of lessons in class do not support it. To overcome these problems, researchers designed and implemented learning methods in the pre-incubation activities. The method used by the researcher is to combine three approaches, namely the psychological approach, organizing the learning curriculum, and applying communication management between work groups and the administration of performance progress. In the psychological approach, the researcher applies the GROW coaching model method. While implementing the learning curriculum, the researcher applied the block scheduling method, and to manage communication management between group members, the researcher used the daily stand-up meeting (daily scrum) method. The success rate of this research is evaluated based on the speed of the tenant group in building software for a minimum scale of viable products. If before participating in pre-incubation activities, these tenants take 5 months to 6 months (1 semester) to build software, then after participating in pre-incubation, they are able to build software within 5 days to 20 days (1 week to 4 weeks).

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INTRODUCTION

It is widely acknowledged that the development of science and technology has transformed the economic order of society. Where the transformation is marked by the process of transferring ideas that were originally from the laboratory to the market [1].

To promote technology transfer, academics especially universities, continue to improve their technology transfer mechanisms to promote entrepreneurial activities and create new startups. Several mechanisms for promoting entrepreneurship are carried out, among others, through business incubators, technology parks (techno parks), and the provision of office space side by side with the development of these new businesses [1].

There is a study that mentions a framework for mapping business incubation activities to support the accelerated process of student start-up development. Where in the study, business incubation activities were divided into two activities, namely (1) pre-incubation activities, and (2) incubation activities [2].

At Stanford University, a pre-incubation activity termed Startup Garage is an intensive, project-based course where students design and test new business concepts that meet real-world needs. So this startup garage is a learning class where students will learn to apply the concepts of design thinking, engineering, finance, and business organization skills. At the end of the learning activity, the student team will develop,

prototype, and test new products or services, business models, and company creation plans [2].

During the period September 2021 to February 2022, the author fosters 3 student teams to develop startup companies. The three teams consisted of 14 students. Over a period of 6 months, the three student teams went through a series of pre-incubation processes with the aim of improving their skills to develop software. Where the software they develop will later be used as the main object of business in their startup.

One of the problems that occur between education at universities and business incubators is the gap, such as prospective startup developers (tenants) who do not understand financial risk, lack of mastery of knowledge and skills, ignorance of market potential, and ignorance regarding business risk prevention. For this reason, before the tenants enter the incubation phase, they should first need to be bridged by a series of pre-incubation processes. Where some of the pre-incubation activities include market testing with sales, coaching, training, and insurance [3].

In the field of software startups or startup companies that focus on software development as the core business, mastery of knowledge and skills in software development is very important. In this study, the authors will focus on coaching and training activities, with the aim of eliminating the gap between the lack of mastery of knowledge and skills and the demands for speed in software development in the start-up companies they build.

In order to optimize the pre-incubation process in accordance with the targets that have been set, the authors collaborate with three methods that have been tested previously. Broadly speaking, the first method used aims to explore self-potential and strengthen the mentality of the tenants. In the second step, researchers provide learning materials that are compressed but sufficient to meet the needs of basic theory and practical theory according to the latest technological trends. The last step is to provide a structured mechanism so that the process of communication and collaboration between individuals in each team is well coordinated.

To optimize the first step, namely mental strengthening and revealing self-potential, the author utilizes coaching techniques using the GROW (Goal, Reality, Options, Will) method. Meanwhile, to optimize the second step, the author applies a learning pattern with block scheduling. Meanwhile, to optimize the third step, the author uses the daily stand-up meeting method or sometimes also known as the daily scrum. Where the daily scrum is one of the practical methods in a series of Agile Scrum management patterns.

Until now, coaching activities have been used by organizations to improve the performance of the people in it. In the United States, between 25% and 40% of Fortune companies regularly use the services of a coach. The same was also reported in Europe and Australia [4].

There is an emerging evidence base that coaching is a powerful tool to support learning and development for students, faculty/teachers, university leaders, and educational institutions. Various coaching approaches have been used successfully [5]. One coaching methodology that is very easy to implement is behavioral coaching such as GROW, which stands for Goals, Reality, Options, and Will [5]. By utilizing this GROW model, it is proven that the morale and potential of the coachees can be improved and maintained for 3 months during the coaching period [6].

The second mechanism given to tenants is the preparation of the curriculum for learning materials. The step-by-step arrangement of learning materials is of course the main thing in the learning process. From the research results, it is proven that the learning system with block scheduling is able to significantly increase student achievement [7]. In recent years, many schools in the United States have modified their learning model. Some educators suggest using block scheduling, where this model allows students to take less learning material over a longer period of time. So this can minimize disruption of student concentration because of the large amount of material that must be studied. Where the final result of learning this model will increase student achievement [7].

One of the contributions to this research is the mechanism for compiling a block scheduling curriculum which consists of 6 lesson topics. Each lesson topic contains a series of teaching materials that are arranged using the Example-Problem-Based-Learning (EPBL) learning pattern. According to the research results, EPBL is proven to be more effective than the Teacher-Centered-Learning (TCL) learning pattern [8].

In other studies, to optimize the learning process, teachers also need to pay attention to the characteristics of each student's learning style. The academic literature identifies several learning styles. Visual, Auditory, and Kinesthetic Style (VAK) are usually used to classify learners as Visual learners, Auditory learners, or Kinesthetic learners [9]. Based on the results of the study, the research on the block scheduling sequence also considers the learning styles of each tenant.

Startup development is certainly done in groups, so the learning process must also be done in groups. When individuals are involved in group work, they need to have regular discussions

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to solve various problems and share information with each other as they learn. For this reason, it is necessary to have a structured team management mechanism so that the process of sharing information and solving problems occurs in a positive and well-documented manner.

One method for managing team performance is scrum. This scrum method has been widely used in various fields, including to manage software development [10]. Scrum was first introduced in 1986 by Hirotaka Takeuchi and Ikujiro Nonaka in an article in The Harvard Business Review entitled "The New Product Development Game" [11]. Many Scrum methods are implemented so that a system can continue to adapt to an ever-changing environment [11]. The scrum framework is divided into several parts, namely (1) Product Backlog, Sprint Planning, (3) Daily Scrum, and (4) Sprint Review & Retro [10]. In the pre-incubation activities, not all Scrum frameworks were applied. Therefore, in this study, one of the scrum elements used is the daily scrum, or another term is the daily stand-up meeting.

One of the effective communication management models between individuals is the daily stand-up meeting or the so-called daily scrum. The daily stand-up meeting is one practical part of a series of Scrum frameworks. Based on the results of research on 12 software development teams in Malaysia, Norway, and Poland, it was found that the daily stand-up meeting was able to contribute to positive attitudes, including communication to solve problems, share information and improve reporting of work status to company leaders [12].

In previous studies, this pre-incubation activity was divided into several aspects of measurement. The first measurement is hard skill measurement which includes (1) successful feasibility study, (2) potential customer, and (3) Potential source of funding. While the second aspect is the measurement of soft skills which include (1) business skills, (2) professionalism (3) innovativeness of the proposed business (4) commitment (5) client knowledge [3]. From several aspects of the measurement, the need for hard skills that must be answered at the beginning is a successful feasibility study. While on the soft skills side what must be built at the beginning is commitment and professionalism.

The problem that occurs is the gap between the university and the business incubator. One example of the problem is the lack of knowledge and skills [3], so a successful feasibility study on the educational process at universities is not measured properly. Too much learning material is one of the contributing factors. In the end, it

makes students less focused on learning the learning material. In addition, the second problem, the composition of the curriculum and learning materials is also not necessarily in accordance with the learning style of each student. Students who have a visual kinesthetic or visual kinesthetic learning style, of course, will find it difficult if the teacher delivers the material with many lectures and little practice [14]. The third problem, learning materials in class, is sometimes not case-oriented. There are still many teachers who use the teacher-centered-learning method so student learning performance is not optimal. In fact, from the research results, it is proven that how to learn example-problem-base-learning is more effective than teacher-centered-learning [8].

In terms of soft skills, there are also gaps in education at the university. There are almost no educational curricula at universities that provide soft skills education, such as interpersonal skills, values, attitudes, motivation, achievement, and team players. Whereas soft skills education for adults (andragogy), is the key to the success of hard skills education [14]. This soft skill education competency is indeed very difficult to measure and very difficult to observe [14]. Due to this level of difficulty, not many university lecturers apply it. In fact, it is this factor that reason the initial gap in education at university.

To narrow the educational gap, three methods were used in this research approach. The first method is the GROW coaching model, which aims to find motivation and learning commitment from tenants. The second method is to rearrange the curriculum and learning materials, which are adapted to the learning styles of the tenants. The learning materials used are, of course, example-problem-based-learning. While the third method is a management system to manage and observe their work commitments. For this third method, researchers use daily stand-up meetings (daily scrums). Where the results of this daily scrum will later be written on the Kanban board diagram.

RESEARCH METHOD

In this study, the research object was 14 students of STIKOM PGRI Banyuwangi, which were divided into 3 teams. Where the 14 students are taking "Merdeka Belajar-Kampus Merdeka (MBKM)" program, specialy the entrepreneurship sub-program. Of course, students who take part in the MBKM program do not follow the regular class learning process. The entire study period is carried out at the STIKOM PGRI Banyuwangi Business Incubator.

In this study, the formulation of the problem discussed is "how is the influence of GROW

coaching model, block scheduling, and Daily Scrum to improve tenant ability?". Where the tenant's ability is measured by their speed in developing the minimum version of the software product or the term is the minimum viable product (MVP).

Therefore, the theoretical model that is used as a reference in this study is shown in Figure 1. Three methods (GROW coaching model, block scheduling, and daily scrum) proposed in this study were used as independent variables. However, before the three methods were applied, the researcher applied a pre-test to explore the initial data on the ability of tenants. The results of the observations of the independent variables are written in the level section. Where this level section contains the results of observations of the quality of soft skills and hard skills. If the variable quality of soft skills and hard skills can be improved, it will affect the dependent variable, namely when the tenant is in the minimum viable product (MVP) software development stage. Improving the quality of soft skills and hard skills will greatly affect the time needed to develop MVP applications.
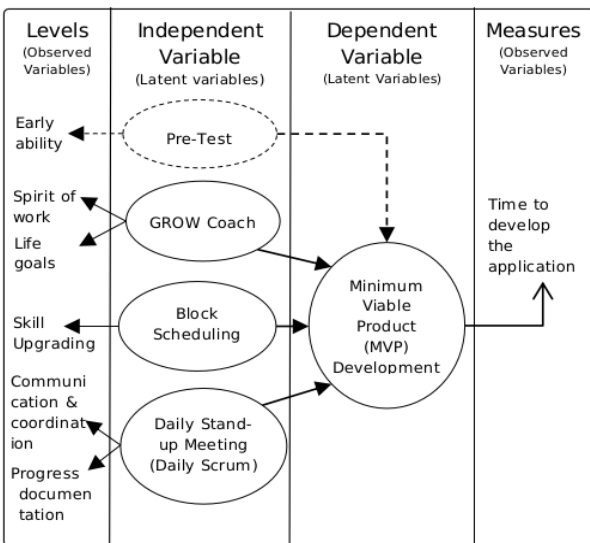

Figure 1. Theoretical Model

The approach in this research combines three methods. Where these three methods include strategies for strengthening the mentality of tenants, increasing their knowledge and skills in developing software, as well as managing discussions and communication between team members. Therefore, there are 3 independent variables in this study, namely GROW coaching, block scheduling, and daily scrum. of the three independent variables will later affect the dependent variable, namely when the tenants

build the minimum version of the software, or minimum viable product (MVP).

Pre-Test

In this research, the experimental method is used, where the measurement uses pre-test and post-test. A pre-test is used to measure the skill level of the tenants in developing software. The list of questions at the time of the pre-test is as shown in table 1 below:

Table 1. List of Question Pre-Test

No.	List of Question
1.	what software products have been made?
2.	how long did the software product take to build?
3.	do you understand machine code algorithms and logic?
4.	do you understand the Request for Comments (RFC) standard that governs how web servers and web browsers work?
5.	Do you already know your learning style? If you don't know, please fill out the learning style questionnaire available at https://akupintar.id/tes-gaya-belajar

The answer to pre-test number 5, namely the learning style of each tenant will greatly affect the curriculum structure at the training stage. In addition, the trainer's teaching style will also follow the learning styles of the tenants who are studying. If most of the tenants have a visual learning style, the trainer will provide teaching materials that contain illustrations. If most tenants have a kinesthetic learning style, the trainer will provide an example program for the tenants to practice. However, if most of the tenants have an auditory learning style, the trainer will lecture a lot.

After the pre-test, the next step is to carry out the pre-incubation process. For pre-incubation activities to run optimally, the researcher provides a set of frameworks. The schematic framework proposed in this study looks like Figure 2 below:
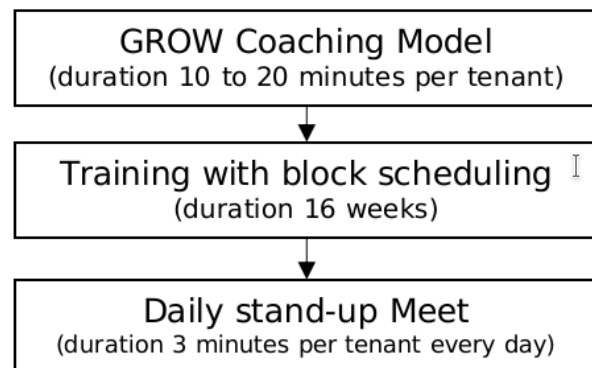

Figure 2. Pre-Incubation Framework [16]

GROW Coaching Model

In this study, the researcher acts as a coach, and the tenant who is the object of the research acts as a coachee. A coach is in charge

of giving questions to the coachee. The coach's job is only to ask questions, he is not allowed to make statements other than asking questions.

GROW stands for Goals, Reality, Options, Will. Where in practice a coach will give questions to coachee. Where the purpose of the question was to lead the coachee (tenant) to find his/her potential and in the end there will be a mental strengthening of the coachee concerned. The list of questions given by the coach to the tenants (coachees) is as follows :

Table 2. List of Question GROW Model [17]

No.	Step	List of Question
1	G-Goals	What are your obsessions or life goals? In your opinion, what are your values?
2.	R-Reality	To achieve that obsession, what have you been doing so far?
3	O-Options	What's the problem? To continue to achieve your obsession, but there are obstacles that you experience. What alternative steps can you take?
4	W-Will	From the alternative steps, what would you do first? When do you take alternative steps?

The Curriculum of Block scheduling

The second stage of this research is training. All tenants will be allowed to improve their abilities and skills in terms of software development. So that the concentration of the tenants is not disturbed and the focus of the subject matter is neatly arranged, the researchers developed a curriculum based on block scheduling.

Broadly speaking, the curriculum structure of startup software is as follows:
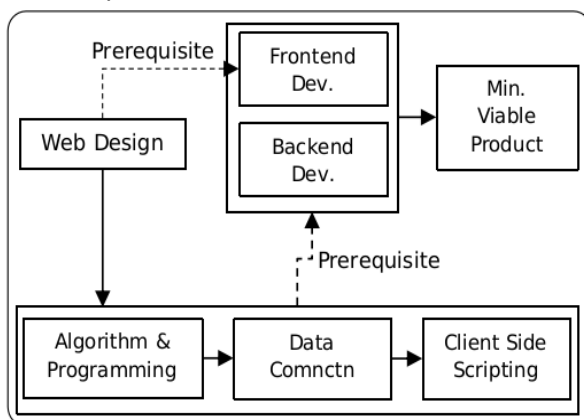

Figure 3. Curriculum Structure

The length of the study is 16 weeks (4 months), and the study schedule starts from Monday to Friday every week. Each day they are given 7 hours of study time, with the following division of time: (1) discussion with the team for 15 minutes, (2) studying the material given by the trainer for 4 hours, and (3) writing down the material they have learned for 1.5 hours to 3 hours.

The curriculum model is arranged based on block, with block scheduling arranged as listed in table 3. All tenants are required to study each block of material in full until it is completed, according to the block order. So tenants are not allowed to study other materials before the entire material on this block is complete.

At the faculty of computer science and information technology, the main courses presented are programming languages and their environment. Therefore, the content, form, and teaching methods must be adapted to the contemporary state of the programming language, methods, and developments of the programming language. Algorithms and programming are early learning materials in that faculty [13].

However, for students who have a visual learning style, the material on algorithms and programming is not interesting. This is because the material for algorithms and programming cannot present a good appearance. Therefore, in the block scheduling curriculum arrangement, the initial material presented is web design. After the web design block has been finished, it is continued with the discussion of algorithms and programming.

As for students who have a kinesthetic learning style, the web design lesson which contains how to create Hyper Text Markup Language (HTML) and Cascade Style Sheet (CSS) is very suitable for their learning style. Some examples of HTML and CSS scripts they can practice immediately so that they can quickly understand what the purpose and objectives of the lesson are. Students who have an auditory learning style, will usually quickly adapt to their environment.

Giving material on algorithms and programming alone is not enough. Due to the fact at the moment, currently, the majority of computer technology is based on websites and mobile apps. To understand in-depth, the technology of websites and mobile apps, students also need to understand data communication technology that runs on internet network protocols (TCP/IP protocols). Website applications require a web server and a web browser. Where the web server and web browser are built from socket programming. Therefore, the third block in this

curriculum is studying data communication technology based on the TCP/IP protocol.

After understanding algorithms, programming, and data communication technology, a basic knowledge of programming languages has been obtained. Then the next block of material arranges to develop software by current technological developments. Therefore, the last block of this block scheduling structure is fullstack development which consists of discussing the javascript programming language (client side scripting), frontend development using the ReactJS framework, and backend development using NodeJS.

Table 3. List of Block Scheduling

Weeks	Material Block	Teaching Materials
1st to 2st week (10 days)	Web Design	https://bit.ly/ekoheri-web-design
3st to 5st week (15 days)	algorithms and programming	https://bit.ly/ekoheri-algoritma-pemrograman
6st to 8st week (15 days)	Data Communication	https://bit.ly/ekoheri-web-server
Week 9 (5 days)	Client Side Scriptng	https://bit.ly/ekoheri-ajax
10st to 12st week (15 days)	Frondend Development	https://bit.ly/ekoheri-reactjs
	Backend Development	https://bit.ly/ekoheri-backend-development
13st to 16st week (20 days)	Minimum Viable Product (MVP) Development	-

In this second stage, researchers act as trainers and tenants act as training participants. The task of the trainer in this activity is to deliver learning materials in accordance with the established curriculum. Another trainer's task is to provide time for tenants to consult and ask questions related to subject matter that has not been mastered.

Daily Scrum

The third stage of the research process is the daily stand-up meeting or daily scrum. The daily scrum mechanism is that each tenant is given a maximum of 3 minutes to discuss everything related to the learning process. For the discussion to be structured, the discussion material is arranged into a list of questions as shown in Figure 2 below.

1. What did you do yesterday?
2. Has the target been achieved yesterday?
3. What are the obstacles?
4. Has it been discussed with team members? Who is invited to the discussion?
5. What will you do today?

Figure 2. Daily Scrum Questionnaire [16]

In this second stage, the researcher acts as a scrum master. Where the task of the scrum master is to control the meeting, regulate who has the right to speak, and control the time of the speaker so as not to exceed the time limit of 3 minutes per person. Another task of the scrum master is to write down the results of the agreed meeting in the form of a to-do list. Where the to-do list is finally written on the Kanban board diagram.

RESULTS AND DISCUSSION

This section presents the results for prior knowledge (pretest performance), training effort during the pre-incubation phase and achievement (post-test performance).

Pre-Test Phase

From the results of direct questions and answers with tenants, the results of the pre-test are as follows: for the first question, all tenants answered that they had built a website or personal portfolio weblog. As for the answers to the second pre-test, they need one semester (5 to 6 months) to build a weblog application, according to the demands of the coursework. As for the third and fourth questions, none of the tenants could explain them.

To answer the fifth pre-test question, namely knowing their learning style, the tenants answered the test questions available at https://akupintar.id/tes-gaya-belajar. After taking the test, the results obtained from 14 people that 8 people have a visual-kinesthetic learning style, 5 people are visual-kinesthetic and 1 person is auditory-kinesthetic.

Coaching Phase

The students tested in this study were all over 17 years old (adult age). The learning model for adults is different from that of immature humans. For adults, time is very valuable. They also prefer to be given specific topics rather than general topics. From the social aspect, almost all adult learners have diverse life experiences [14]. The learning process of adults can be controlled when the content of teaching is related to the experiences they have experienced. Taking this into account, the learning process that connects

life experiences with learning content will provide an interesting understanding for them [14].

The life experience of an adult human determines his obsession with himself. When learning new things, adult humans will have a high enthusiasm for learning if what they learn is in accordance with the obsession to be achieved. So a coach needs to explore the obsessions of his students. In this study, the method used to explore the potential of students is the GROW coaching model.

In this coaching activity, the coach provides time for personal questions and answers with tenants. Each tenant is given 10 minutes to 20 minutes. Where the number of tenants is 14 people, the total time provided by the coach is 140 minutes to 280 minutes. Each tenant was asked by the trainer according to the list of questions in table 2 [17].

To document this coaching activity, researchers used a voice recording device, namely a cellphone. Of course, this voice recording data becomes a data asset that is very confidential and is not published to everyone. Only the tenant concerned can copy this data. This voice recording data try all things related to the identity of the tenant, including the disgrace regarding his self-esteem.

From a series of trial processes, it turns out that the GROW coaching model shows positive things. All tenants are proven to be able to find their potential. All the problems experienced so far, it turns out that their solutions can be found from the thoughts of the tenants themselves. In fact, in this GROW coaching model, the coach only asks questions, without ever providing any solutions to the tenants. The GROW coaching model is one of the most suitable methodologies to help students recognize their potential. From the test results, there is evidence that within 10 minutes to 20 minutes, the tenants are more confident that their obsession can be achieved.

Training Phase

Basically, the training material given in the pre-incubation activities is the same as the material they have learned in the regular class. The difference is that the material in the regular class uses the the Indonesian National Qualifications Framework based on a college credit of unit system [18], while in this pre-incubation activity a block scheduling system is used.

If using the "a college credit of unit" system, the curriculum arrangement as shown in figure 4, requires study time for 8 semesters (48 months). This happens because one subject is usually a prerequisite for another lesson. So not all lessons

can be given at the same time, waiting for the prerequisite lessons to be learned. An example of a curriculum arrangement that uses the Indonesian National Qualifications Framework (Kerangka Kualifikasi Nasional Indonesia/KKNI) is as follows in figure 4.
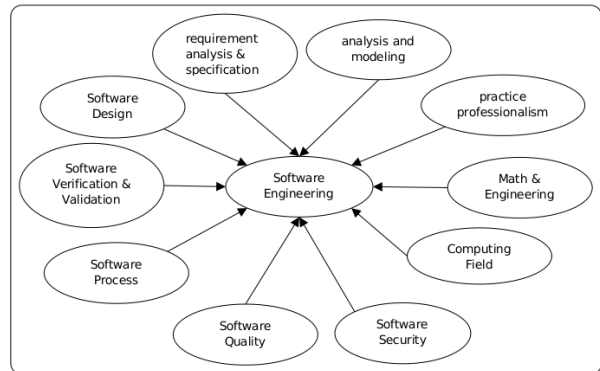

Figure 4. College Unit of Credit System [18]

In figure 4, it takes 16 meetings to discuss one subject. If the meeting is held once a week, it will take 16 weeks to discuss the material. The computing field (algorithm and data structure, discrete mathematic, etc.) lessons take 16 weeks to complete. Meanwhile, in other conditions, object oriented programming lessons are impossible to learn if the material on algorithms and data structure has not been completed. Because algorithms and data structure lesson is a prerequisite for object oriented programming lessons.

This condition creates a gap between university education and business incubators. Software development at the start-up requires a fast time. Meanwhile, the education process at the university is running slowly. This is evidenced by the pre-test results which show that tenants need one semester (5 to 6 months) to build a website application. The website application created is a personal portfolio website (weblog).

The comparison between the Indonesian National Qualifications Framework and block scheduling is shown in Figure 5 below. In the Figure 5, part a describes the block scheduling-based curriculum model. Meanwhile, Figure 5, part b, explains the "college of unit" system-based curriculum model [18]. Students ideally do the learning process for 8 hours per day. With block scheduling, students will receive one-course material within 8 hours. While in the Indonesian National Qualifications Framework, students will receive more than one subject matter within 8 hours.
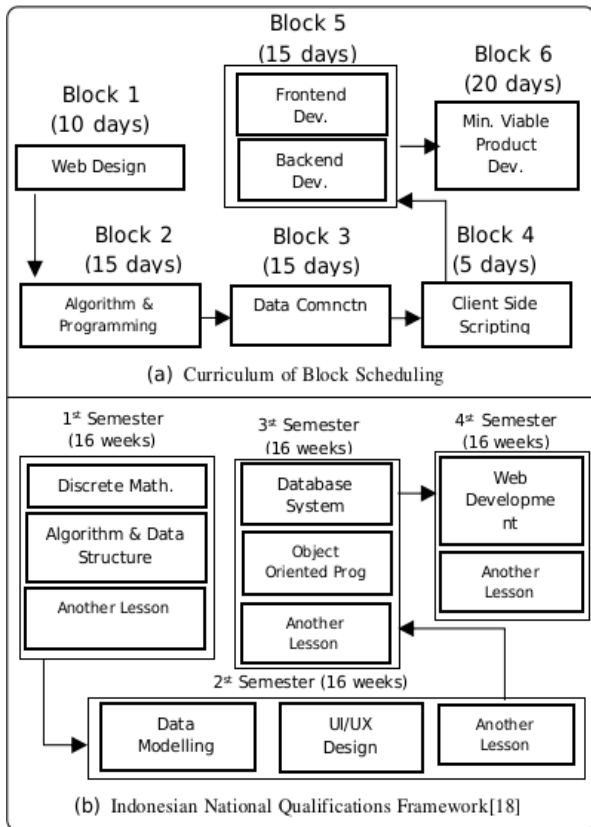
Figure 5. Comparison of Curriculum

The lesson on block scheduling as in table 3, is the same as the lesson on Indonesian National Qualifications Framework based on a college credit unit (Satuan Kredit Semester/SKS). Block scheduling also applies pre-conditions. The only difference is the learning schedule. With this block scheduling, it is proven that the tenants can learn more purposefully. There are not many lessons to be learned every day. Therefore, mastery of knowledge and skills can also be improved in a short time. It is proven that after participating in pre-incubation for 60 days (September 15, 2021 - December 31, 2021), the tenants can create website applications in just 1 week to 4 weeks (January, 2022). Even though the website application that was built was already utilizing the technology studied in the last material, namely frontend development and backend development.

The block scheduling system is proven to be able to speed up the learning process for students. In addition, students are also more focused on learning subjects from one another, because the process of studying the material is one by one. The acceleration of this training process has been proven to significantly affect the process of making software which is the object of their startup business.

Post-Test Phase

The results of their work and the duration of the process of their work are recorded in table 5 below :

Table 5. List of Products Created by Tenants

Team Name	Work Duration	URL's
Kriyathor (5 members)	Jan 3, 2022-Jan 7, 2022 (5 days)	https://kriyathor.com
Wlijo (5 members)	Jan 3, 2022-Jan 28, 2022 (20 days)	https://wlijo.com https://mitra.wlijo.com
Kudhung (4 members)	Jan 3, 2022-Jan 21, 2022 (15 days)	https://kudhung-stylesapp.herokuapp.com/

The Kriyathor team consists of 5 students. Their software product is an online shop that helps craft entrepreneurs to market their products online. This kriyathor's website is connected to a database on the shopee's marketplace (https://shopee.co.id). The appearance of this kriyathor website looks like the following in figure 5.
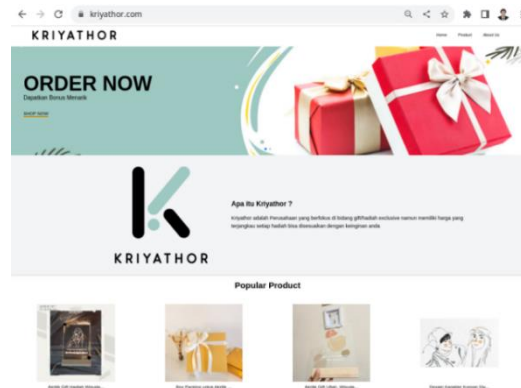

Figure 5. Appearance of Kriyathor's Website

The Frontend application on the Kriyathor Website is built using ReactJS technology. While on the backend using ExpressJS technology. Data scraping technology is used to retrieve data from shopee (https://shopee.co.id). While the database engine uses MySQL.

The Wlijo's team consists of 5 students. Their software products are mobile apps that help greengrocers market their products to their customers. The appearance of the Wlijo's website looks like the following in figure 6.

The Wlijo's team used ReactJS to build the frontend app and ExpressJS to build the backend app. While their database engine uses MySQL.
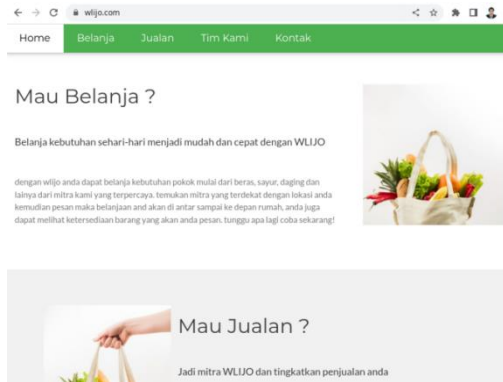
Figure 6. Appearance of Wlijo's Website

The Kudhung's team consists of 4 students. Their software product is an online store application that helps Muslim fashion traders to market their products to their customers. The appearance of the Khudung's website looks like Figure 7 below.

The Kudhung's team used ReactJS to build the frontend app and ExpressJS to build the backend app. While their database engine uses SQLite.

Figure 7. Appearance of Kudhung's Website

Daily Scrum Phase

When they work with their team, communication and coordination between them must be well established. The communication and coordination process is regulated by the daily stand-up meeting mechanism, another term is the daily scrum. The daily scrum mechanism is carried out every morning before learning activities are carried out. The daily scrum mechanism is that each person must present everything that has been done yesterday and will be done later. Presentation time for each person is a maximum of 3 minutes [16]. So if a team consists of 5 people, then the time needed for this daily scrum is 15 minutes. Their presentation

material is the answer to the daily scrum questionnaire in Figure 2.

Daily stand-up meetings are a proven good method of making communication between team members. In just 3 minutes per person or 15 minutes per team, every day the team members will participate in intensive discussions to find obstacles and at the same time find solutions to their obstacles.

In order for the documentation of the daily performance to be well written, the list of work agreed upon in the daily scrum will be written on the Kanban board diagram. Likewise, the results of their work progress will also be neatly documented on the Kanban board diagram. An example of a Kanban board diagram as a result of their activities is shown in Figure 8 below.

Scrum frameworks are usually combined with kanban board diagrams. While scrum manages team management, Kanban manages work schedule management. When these scrum and kanban boards are combined, they are statistically proven to lead to successful project development. The merger of scrum and Kanban is hereinafter called agile scrum [15]. In this study, the daily scrum mechanism must be followed by neat documentation. To produce neat activity documentation, the scrum framework is combined with a Kanban board diagram.
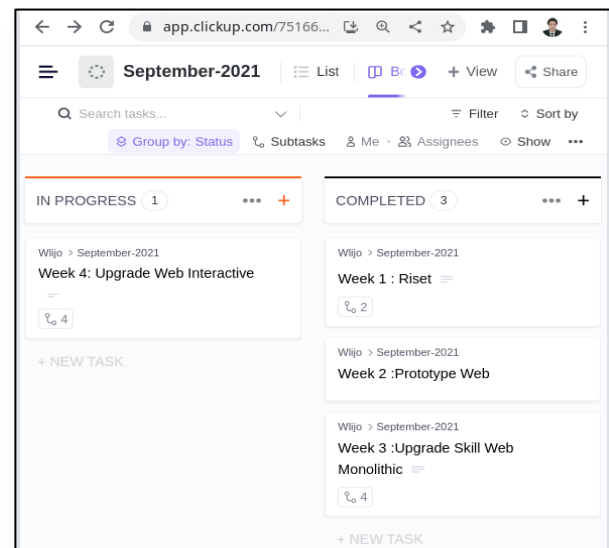

Figure 8. Kanban Board Diagram

From a series of trial processes, it turns out that the daily scrum mechanism has a positive value to maintain communication and coordination of tenants in each of their teams. It is evident from the documentation of the progress of each tenant's performance that can be seen every day through the Kanban board diagram. Even the

obstacles they experienced and the solutions they found, can also be seen in the comments section of the kanban board diagram. Not only the tenants, but the trainers can also see directly their performance progress reports through the kanban board diagram.

CONCLUSION

The conclusion that can be drawn from this research is that the pre-incubation software startup framework has proven to be effective in improving the soft skills and hard skills of the tenants. In the standard Indonesian national qualification framework, the curriculum content mostly only regulates the standardization of hard skills. Not found specifically how the standard to improve soft skills. Whereas for adult learning (andragogy), soft skill learning has a very strong influence. The GROW coaching model and daily scrum methods are proven to be able to improve the quality of soft skills. Just to apply these two methods, teachers need to work more. In this study, it has not been discussed how the strategies of several teachers (team teachers) to apply these two methods in team teaching.

In the standards of Indonesia's national qualification framework, especially in the fields of informatics and computers, the scope of learning materials is too broad. As a result, the material that students learn is also too much. This has created a gap between education in university and the needs of industry, especially business incubators. Simplification of subject matter and material delivery strategies using block scheduling have proven to be very effective in improving the quality of students' hard skills. the limitation of this research, the scope of the material in the curriculum is only taken a few lessons core. For other supporting subjects, it is not applied to this block scheduling curriculum.

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